

January 1996

Full Issue: vol. 50, no. 1

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(1996) "Full Issue: vol. 50, no. 1," *Sci-Tech News*: Vol. 50: Iss. 1, Article 17.

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SCI-TECH NEWS

The Official Bulletin for the Aerospace, Engineering, Metals/Materials, Nuclear Science,
and Science-Technology Divisions of the Special Libraries Association

Volume 50, Number 1

February 1996



ISSN0036-8059

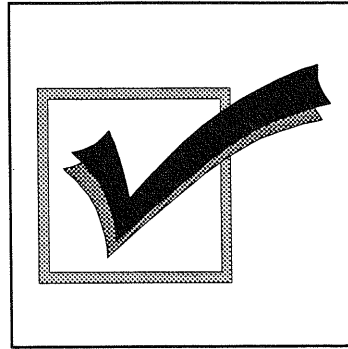
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- Developing a strategic plan

For further information or to receive a copy of the 1996 MMI brochure, contact the Special Libraries Association's Professional Development Department at 1-202-234-4700, ext. 649 or send an Internet message to tracy@sla.org.

ISSN 0036-8059
Volume 50, Number 1
February 1996

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Photo Caption: Related to this winter's stormy weather is this depiction of the effect of earthquakes. The illustration is included in the book by Arnold Boskowitz entitled *Earthquakes* (London: G. Routledge; 1890—

translated from the French by C. B. Pitman). Photo furnished by The American Philosophical Library, Philadelphia, courtesy of its Curator of Printed Materials, Roy E. Goodman.



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SCI-TECH NEWS (ISSN 0036-8059) is published quarterly (February, May, August, November), available for \$20.00 (U.S. subscribers) and \$22.50 (Foreign subscribers), by the Aerospace, Engineering, Metals/Materials, Nuclear Science and Science-Technology Divisions of the Special Libraries Association, 7701 Legacy Drive, Plano, TX 75024-9001. Second-class postage paid at Plano, TX and additional mailing offices. **POSTMASTER:** Send address changes to *Sci-Tech News*, Suzanne Ogden, Frito-Lay, Inc., Corporate Library, 7701 Legacy Drive, Plano, TX 75024-9001. Printed in U.S.A.

Publication Policy: *Sci-Tech News* is the official bulletin of the Aerospace, Engineering, Metals/Materials, Nuclear Science, and Science-Technology Divisions of the Special Libraries Association. The contents of articles and editorials are not to be construed as being or representing the official position of the sponsoring divisions.

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Manuscripts: The editor solicits papers of interest to the community of science and technology-oriented special libraries. Manuscripts of articles should be typed in doublespace, or sent via E-mail (in ASCII format) to the editor's address: 70661.636@compuserve.com. or sent by FAX to: (201) 836-1682.

Subscriptions: Special Libraries Association members in the Aerospace, Engineering, Metals/Materials, Nuclear Science and Science-Technology Divisions automatically receive subscriptions to *Sci-Tech News*. Their annual subscription fee of \$3.50 is paid from their annual dues to the Special Libraries Association. All others may subscribe for \$20.00 (U.S. subscribers) and \$22.50 (Foreign subscribers). Inquiries concerning subscriptions should be sent to the subscriptions manager.

Address Changes: These should be communicated to either the Special Libraries Association, Membership Department, 1700 18th St., N.W., Washington, D.C. 20009, by those who receive *Sci-Tech News* as a consequence of their membership in one or more of the sponsoring divisions, or to the subscription manager, by all other subscribers.

Offices: *Sci-Tech News*, c/o Suzanne Ogden, Frito-Lay, Inc., Corporate Library, 7701 Legacy Drive, Plano, TX 75024. Editor, Ellis Mount, 471 Emerson Ave., Teaneck, NJ 07666; (201) 836-1137; Compuserve number 70661.636. Business Manager, Barbara Sanduleak-Parkinson, 10919 Wood Hollow Drive, Chardon, OH 44024; (216) 285-2327. Advertising, Bonnie Osif, Pennsylvania State University, 325 Hammond Building, University Park, 16802 (814) 865-3697. Subscriptions, Suzanne Ogden, Frito-Lay, Inc., Corporate Library, 7701 Legacy Drive, Plano, TX 75024; (214) 334-4732. Printed by Imperial Printing Co., St. Joseph, MI.

FROM THE EDITOR

There's no point in dwelling on the crushing blow the weather has given much of the country in January since it's been thoroughly covered by all the media. Needless to say, the effects on the mails and the preparation of copy for this issue have been unfortunate. So if the issue reaches you later than usual, it shouldn't be a surprise. We've done all we can to keep on schedule.

Contents of the issue

In spite of its troubled period of preparation, this issue is special. It marks the beginning of the **50th year** of *Sci-Tech News*. There will be some special features in this and succeeding issues to celebrate this event.

We include an account of the history of the bulletin, based largely on a review of past membership lists by the Sci-Tech Division's Archivist, Janet Hughes.

One feature article is a detailed account of the 1995 IFLA meeting held in Turkey. Nancy Anderson, a veteran attendee of several IFLA meetings, gives a detailed account of the conference.

Another feature is the article by Alan Engel which describes a machine translation system for handling Japanese patents, a highly technical field.

In view of the amount of downsizing and reductions in library service these days an editorial on what

librarians can do about it should be of great interest. Such an editorial, written by Susan DiMattia, is included in this issue.

One special topic, described on page 47, concerns a change that I've been thinking about for some time—a way to improve our coverage of book reviews. I will welcome your comments. This will explain the appearance of a new section on book reviews, along with a few traditional reviews.

Please note the survey that Tobi Brimsek at SLA Headquarters has prepared on page 5. She will appreciate your participation.

Ellis Mount

<u>Publication Dates</u>	<u>Deadlines for Copy</u>
February	January 15
May	April 5
August	July 5
November	October 5

Contributors are urged to send the Editor a printed copy of their material as well as a diskette in WordPerfect or ASCII format, if possible.
Or use E-mail: 70661.636@compuserve.com,
or Fax (201) 836-1682.

NEWS TO NOTE

IN MEMORIAM:

Margaret A. Firth

Word has been received of the passing of Margaret (Peg) Firth, a member of SLA since 1942. She served as a secretary of the Association in the 1950s and had been very active in both the Sci-Tech Division and the Metals/Materials Division.

The Sci-Tech Division presented her with its Honors Award in the 1960s. For many years she was the librarian at the United Shoe Machinery Research Division in Beverly, MA, later becoming a hospital librarian until her retirement around 1983.

SLA PHARMACEUTICAL DIVISION SPRING MEETING

The Pharmaceutical Division Spring Meeting is scheduled for March 6-8, 1996, at the Mark Hopkins Hotel in San Francisco, CA, so mark your calendars! The theme of this year's meeting is "Re-engineering Library and Information Services."

It will include Bonnie Snow's (Knight-Ridder) recently updated, all-day, continuing education course on "Drug and Pharmaceutical Information Resources," a tour of the Genentech library, and presentations from five Division members on their experiences in regard to re-engineering library services.

For more information contact Karen Kreizman at: 716-887-3637; E-mail KREIZMAN@BMS.COM

SAN DIEGO CHAPTER ANNUAL SPRING SEMINAR

The annual Spring Seminar sponsored by the San Diego Chapter of SLA will be held March 22, 1996, at the Radisson Hotel in La Jolla, CA. The all-day seminar will focus on ownership and preservation of digital information, legal interpretations of the use of copyright electronic resources, and utilizing the most efficient search avenues to locate scientific information on the Internet. The seminar will include mid-afternoon, informal demonstrations of state-of-the-art research tools. The cost is \$50 (SLA members) and \$65 (non-members).

For more information contact Karen Sharpe at: 619-594-4695.

INSPEC'S \$500 TRAVEL STIPEND AWARD

Bette Finn

Scholarship Committee Chair (Engineering Division)

The Engineering Division has information of interest to all student members of SLA, not necessarily members of the Engineering Division.

INSPEC is sponsoring for library school students the award of a \$500.00 travel stipend toward payment of expenses incurred while attending the Annual Special Libraries Association Conference, June 8-13, 1996, in Boston, MA. The INSPEC award will be given to the qualified student who submits an essay of three or less double-spaced typed

pages that is judged to be best in describing how engineering and science librarians can market their services to their clientele.

Qualifications for Entering Award Competition:

1. Be a student member of the Special Libraries Association
2. Be attending his or her first SLA Conference

Special Instructions:

1. Give your full name, address, telephone number, and a statement, on page one, of your qualifications, as given above, for entering the award competition
2. Type your full name (without any additional personal information) at the top

of each essay page. Double space the typing on all pages.

Deadline for submission: March 22, 1996. The recipient of the ISPEC Award will be notified by the first week of May 1996.

Submit entries for the award to:

Bette Finn
Georgia Tech Library & Information Ctr.
Georgia Institute of Technology
Atlanta, GA 30332-0900
Tel: 404/894-1790;
Fax: 404/894-8190
E-mail: bw21@prism.gatech.edu or
bette.finn@library.gatech.edu
Home: (404) 355-3007

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All information service providers contributing to the Aerospace, Engineering, Metals/Materials, or Science-Technology Division programs, planned for the Special Libraries Association's 87th Annual Conference in Boston, June 1996 are eligible to win **free advertising** in the August 1996 issue of Sci-Tech News, valued at **\$350**.

Companies are encouraged to sponsor as many divisions as possible. A company name will be entered in the drawing multiple times, if it is sponsoring more than one of the divisions listed above at the 1996 conference. The deadline for contributions is **April 30, 1996**. The drawing will be held at the Science-Technology Division's Annual Breakfast meeting, **Monday, June 10th, 7:30 - 8:45 a.m.**

To make a contribution, please contact the following as soon as possible:

Aerospace Division	Susan Clifford	(310) 334-1700
Engineering Division	Peter Moon	(203) 722-5486
Metals/Materials Div.	Tanya Barber	(404) 894-4508
Science-Technology	Eleanor MacLean	(514) 398-4744

**RUSSIAN/SOVIET INFORMATION
QUESTIONNAIRE FROM SLA HEADQUARTERS**

**Tobi Brimsek
Assistant Executive Director, SLA**

During the past several years, SLA has been participating in a number of activities and projects related to the development of the information environment in Russia and other former Soviet states. In that regard, we would like to ask you, our members, to assess your information needs from that part of the world. To do so, we ask that you complete the brief questionnaire below and return it to John Latham, Manager, Information Resources, at the Association office via fax (1-202-265-9317) or mail (1700 Eighteenth Street NW, Washington, DC 20009-2508). The deadline for receipt of completed questionnaires is March 22, 1996.

Thank you for participating.

1. In your organization, is there a client demand for information from Russia and other former Soviet states?
☐--Yes ☐--No
2. How has the level of demand for that information changed over the past three years?
☐--Decreased ☐--Remained the same ☐--Increased
3. Are you able to obtain this information on a timely basis?
☐--Always ☐--Usually ☐--Sometimes ☐--Rarely ☐--Never
4. Are you eventually able to obtain the information you need?
☐--Always ☐--Usually ☐--Sometimes ☐--Rarely ☐--Never
5. In what type of organization are you employed?
☐--Corporate ☐--Academic ☐--Government ☐--Not-for-profit
☐--Consultancy ☐--Information Brokerage ☐--Other

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INTERNATIONAL SCI-TECH LIBRARIANSHIP: A REPORT OF THE 1995 IFLA CONFERENCE (ISTANBUL, TURKEY)

By Nancy D. Anderson

For several years now I have reported in *Sci-Tech News* on the activities of the Section of Science and Technology Libraries of IFLA (International Federation of Library Associations and Institutions). This year Sinikka Koskiala of Finland took over my job as Chair of the Standing Committee (SC), while fellow SLA member Patricia Yocum was elected Secretary of the Section. So I suspect this article may be my last for a while. (In IFLA an individual is allowed to serve on a standing committee for a maximum of eight years. Even though I will remain active in the SC as a special advisor, I have joined the Serial Publications Standing Committee. After all, serial librarians should hear the viewpoint of a sci-tech librarian, especially where electronic journals are concerned!)

Last year I was disheartened with the poor attendance of committee members at the IFLA conference in Havana. In 1995 we nearly doubled our SC attendance, but in Istanbul, unlike Havana, we were unable to attract many Turkish sci-tech librarians to our SC meetings as observers. The good news is that two librarians from the Developing World were elected to the SC: Ms. O. Dilebanye from Botswana and Mr. J.C. Anafulu from Nigeria (as a corresponding

member). In general the Section is one of the largest in the Special Libraries Division with 102 registered members.

As always, the SC focused the greater part of its attention on projects and conference programming.

Projects:

World Survey of Availability of Theses in Science and Technology: Due to incomplete data, SC decided not to publish the guide in paper format. The electronic file was sent to IFLA and is now on the following IFLA web site: <http://www.nlc-bnc.ca/ifla/pubs/general/wgddst/wgddst.htm>). Even in this format, the guide is pretty useful: it describes what constitutes a doctoral dissertation in the various countries, what guides and methods of bibliographic control exist for these dissertations (in science and technology), and what access is available for dissertations not covered by bibliographic tools listed previously.

Electronic Deposition of Full-Text Grey Literature Documents This project “examines the problems of access to and conservation of sci-tech grey literature in Eastern Europe, FSU, and Asia and will make recommendations for ensuring improved access internationally to this material.” The feasibility study includes (1) a survey of which 25% of the 286

questionnaires have been received, (2) a study of ongoing sister projects, and (3) a pilot project at National Public Library of Science and Technology (Moscow) of monitoring full-text analogs of sci-tech journals and in-house conversion to CD of electronic files. Findings have been reported at the IDT conference in Paris, June 1995, and an international librarians conference in Krakow-Przegorzaly, August 1995. These reports are available from NPLST. The principal investigator will be presenting further results at the Science and Technology Libraries workshop in Beijing, August 1996.

Survey of the Content and Structure of the Information of WWW/Gopher Services of the IATUL and IFLA Section of Science and Technology Libraries. A report of the initial phase of the study was presented at the August 1996 IFLA University Libraries Section and User Education Roundtable co-sponsored Workshop on Internet Training and Use Internationally by Irma Pasanen-Tuomainen, "Design of WWW browser navigation applications for improved Internet access." Her abstract is as follows: Different design aspects of the navigation method applications of the WWW browsers for improved access are presented as issues for discussion. The approach highlights the similarities to the present environment where guidance in an electronic library bears a resemblance to the physical libraries and there is a likeness between the network and the structured databases concerning information searching procedures. Second phase of the study will focus on in-depth analysis of the content and structure of the WWW/Gopher services' information

presentations. A final report will be issued in 1996.

The Section's informational brochure has been published in English, French, Russian and Spanish. A shortened Chinese-language version will be published for Beijing IFLA conference.

Istanbul Conference, 20-26 August 1995

This year the Istanbul conference did NOT follow the pattern of previous IFLA conferences. There was not a coup as in Moscow (1991), travelers' revenge as in New Delhi (1992), thunderstorms knocking out the electricity as in Barcelona (1993), nor President Clinton recalling our charter flights as in Havana (1994). The PKK was reticent and did not set off any bombs against tourists in Istanbul until the day after our departure. Instead, more librarians attended this IFLA conference than any other previous conference.

Open Session For the last few years the Section's open session program did not have simultaneous interpretation. However, this year it did not affect attendance as the room quickly filled—with 60-70 persons attending and many more turned away. Our program was one of several focusing on the issues of electronic publishing. Patricia Yocum, past-Chair of SLA's Biological Sciences Division and fellow IFLA member not only planned the program but will also be editing the Spring 1996 issue of the *IFLA Journal*, which will contain the better papers from the IFLA conference on electronic journals. The theme chosen for the open session was "Archiving the Electronic Journal." This program featured a new format (for IFLA) of 5

speakers and 2 reactors. The reactors were J.-P. Accart, Centre de Documentation, Centre Hospitalier, Argenteuil, France and Yasar Tonta, Associate Professor, Dept. of Library Science, Hacettepe University, Ankara, Turkey. Abstracts of the presentations follow. (Please e-mail me at ndanders@ux1.cso.uiuc.edu for more information.)

Presentations:

1. "Archiving electronic journals from the serial information provider's perspective" by Wim Luijendijk, Vice President and General Manager, EBSCO Subscription Services—Europe, Aalsmeer, The Netherlands.

Abstract: We are in a time when many people involved in the library community are uncertain about what their and others' roles will be in the near and distant future. All participants in the library community today will have to be flexible and understand the true nature of their existence and their missions. Products and services provided by all will have to change, but missions will stay the same. Although traditionally handled by librarians, the archiving of electronic journals could be handled by publishers, libraries, serial information vendors or even back issue dealers. Document delivery providers will be involved in the archiving of articles in anticipation of customer requests for them. Eventually, however, the party that can archive information the most effectively, efficiently and inexpensively while providing the most access will be the one to do it.

2. "Le Document électronique et ses conséquences sur les professionnels de la Chaîne de l'information" by Christian Lupovici, Associate Director, Institut de l'Information Scientifique et Technique (INIST), Vandoeuvre-les-Nancy, France.

Abstract: L'édition électronique en mode caractères bouleverse l'équilibre qui s'était établi entre les acteurs de la chaîne de création et de distribution de l'information. Le document électronique permet à l'auteur d'être son propre éditeur et à l'éditeur d'être son propre diffuseur. Sa structure comporte tous les éléments qui servent à leur catalogage et à leur indexation. Donc les bibliothèques n'auront plus à effectuer le catalogage original, ni l'indexation, ni le résumé documentaire. La recherche de l'information et la navigation entre les documents amènent à coupler les activités de production de bases de données et de catalogues à la recherche des documents primaires. L'édition électronique oblige des bibliothèques et les centres de fourniture de documents à modifier profondément leur méthodes de travail, leurs infrastructures informatiques et de télécommunication. L'INIST, qui est à la fois créateur de données bibliographiques et fournisseur de documents primaires, se place dans une perspective de liaison entre ces deux activités en collaboration avec tous les partenaires de la chaîne documentaire.

3. "Handling electronic documentation: the librarian's changing role" by Dolores M. Hoelle, Library Systems Analyst/Administrator, Princeton University Libraries, Princeton, NJ, USA.

Abstract: After being heralded for many years, electronic journals have arrived and are here to stay—and in ever increasing numbers. Authors, publishers, vendors, and librarians must resolve a number of critical issues about this new medium. In addition to technical standards, these issues include a wide array of legal, cost, bibliographic control, and archival matters. This paper will concentrate on this latter group of concerns.

4. “Towards a worldwide library” by Bela Hatvany, President, SilverPlatter Information Ltd., Chiswick, London, UK.

Abstract: Introduction: The origin of the journal is in the creation of knowledge—or consensus belief. It plays the role of taking academic conversations and discussions—via a panel of respected peer referees—to a wider domain. It is therefore a center piece in the knowledge creation conversation. This model will also apply to the electronic journal. Electronic journals and the profusion of other electronic media are challenging the role of the information profession in making the body of knowledge available to society in an organised manner. This will continue. In my view the development of the electronic journal will occur at the same time as the re-organisation and redefinition of the role of the information professional, the society they serve and the information industry, within which we all work. For me the future of our industry is the creation of a worldwide library. In this library all of the digital sources in the world will be available in a well-organised context. The worldwide library will be available to all

users, independent of location or computing platform and at utility prices.

5. “Electronic journal access at Tilburg University: a coordinated effort of the library, the computer centre and the publisher” by Christiaan C.P. Kluiters, Academic Publishing Division, Elsevier Science Publishers, Amsterdam, The Netherlands.

Abstract: This paper deals with the first commercial pilot project in Europe on the electronic availability of some 120 journals published by Elsevier Science (ES) in the fields of economics and computer sciences and (applied) mathematics, at the campus network of Tilburg University. After an introduction and a short history the paper will discuss the most important topics in the license such as: authorised user community, authorised usage, user feedback and commercial terms and conditions. Finally, the role of the library and computer centre will be discussed.

Workshop

The Section co-sponsored a workshop with the User-Education Roundtable on “Electronic Journals: Access, Use and Implications for Training,” moderated by Mr. Kesselman. Speakers included Tom Nisonger (Indiana University) on “Electronic journal collection analysis”; Jan Olsen (Cornell University; her synopsis was read by Martin Kesselman) on “Scholars and e-journals”; Tuija Sonkkila (Helsinki University of Technology) on “Training issues”; and Suzanne Grefshem (National Institutes of Health) on “Technical access issues.” Following these presentations a publishers’ roundtable of Arnoud de

Kemp (Springer Verlag), Ted Caris (Cambridge Scientific Abstracts), and Robert Kimberley (ISI) offered their views on electronic publishing. The open discussion which followed these presentations was lively and informative. Americans tend to forget that librarians from other cultures are not as comfortable in the more informal "vendor updates" such as we have at SLA conferences, so it was rewarding to note that this approach was such a success.

Upcoming Conference Programs

Beijing (1996): The theme chosen for next year's open session is "Management of Sci-Tech journals in a time of change." David Price will be program planner. The SC accepted one of the papers offered to the Section by the Chinese Organizing Committee: "Research on the collection and distribution of foreign-language sci-tech journals in China," offered by the Section's corresponding member, Xu Hong-Ying. The workshop theme is "The role of grey literature in science and

technology." As mentioned above, the principal investigator of the Section's project on Grey Literature will organize the workshop.

Copenhagen (1997): The theme for the open session is not yet decided. SC discussed having another session on electronic journals (bringing the topic up-to-date from 1995) or, alternatively, to focus on the broader subject of "changes in scientific communication." Two SC members volunteered to be the ad hoc planning group for the open session. Possibilities considered for the workshop include a "vendor update" much like this year's session in which several important sci-tech publishers will inform the audience of their publishing plans. Another possibility is a workshop co-sponsored with IATUL.

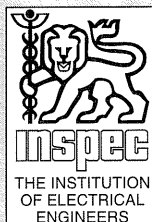
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MACHINE TRANSLATION OF JAPANESE PATENTS

By Alan Engel

“Machine Translation”—There are few terms outside of politics and romance that raise the emotions that “Machine Translation” does. There are zealous advocates, meek apologists, and hardened opponents. Some writers hate the term itself.

International Science & Technology Associates (ISTA) is placing a new product into this environment—“Converted Kokai™” Machine-Translated Japanese Patent Documents.

Why Machine Translation? Why now?

Three recent developments have led ISTA to see an opportunity for providing useful, economical machine-translated patent documents.

Japanese Kokai in Electronic Form

From 1991 the Japanese Patent Office has required that all new filings be in electronic form. The Kokai (Japanese Unexamined Patent Applications, the ‘A’ documents) resulting from these filings began appearing in 1993 on CD-ROMs as full text in machine-readable code (a superset of ASCII). (In contrast, CD-ROMs of European and U.S. patents still contain only images, not machine-readable fulltext code.) ISTA began purchasing these Japanese CD-ROMs in July 1993 and now possesses the oldest private archive of Japanese Kokai in electronic form in the U.S. This archive is complete with all Kokai published since July 1, 1993.

With its archive already being in machine-readable full text, ISTA can eliminate the expense of keying Japanese text into the translator and can thus obtain rapid retrieval.

Translation Software Technology

Translation technology has progressed to the point that it can produce English sentences from Japanese text with reasonable, if far from perfect, accuracy. ISTA has drawn from this technology for its core translation machine.

In-House Software Development

ISTA’s internal development produced viewing software that runs under Windows 95/NT. This program reads a Kokai from the CD-ROM, preedits it, feeds it through the translation machine, postedits it, then produces a printed or facsimile copy of the Kokai—the “Converted Kokai™.”

“Converted Kokai™” - Document Delivery Plus

Side-by-Side Japanese-English Format

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you to take a deeper look at a patent document before making a decision to have it translated.

To promote the use of “Converted Kokai™” as supplements to expert translation and as an intermediate scanning tool, ISTA offers discounts on subsequent expert translations of “Converted Kokai™.”

Future Developments

ISTA’s development efforts focus solely on producing value-added, useful English information from Japanese patent documents and databases. This means that ISTA’s efforts will not be compromised to satisfy the different needs of general articles, manuals, and other nonpatent literature.

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Since the quality of machine translation is highly dependent on the electronic glossaries of the software, ISTA is working intensively to develop and incorporate extensive glossaries suitable for patent documents.

Alan Engel holds a Ph.D. in biochemistry from Rockefeller University and conducted polymer research in the U.S. and Japan for six years before starting International Science and Technology Associates, Inc. in 1987. ISTA, Inc., 950 Conestoga Road, Rosemont, PA 19010-1347 USA; E-mail: aengel@netaxs.com

WHEN THE “DUMB” INCREASES, INCREASE THE SMARTS

By Susan DiMattia

“Is the ‘dumb’ increasing.” a colleague asked. She was reacting to news of the total outsourcing of the Information Research Center of General Electric corporate headquarters (*Corporate Library Update*, Sept. 1, p. 4, Oct. 1, p. 4) and the closed libraries at the Port Authority of New York and New Jersey and Brown Brothers Harriman (*Corporate Library Update*, Oct. 1, p. 1). “How can management not understand the fiscal and competitive implications of their decisions?” is the question on the minds of many librarians. That fatal lack of understanding is a direct result of a lost opportunity on the part of information professionals.

A student in a graduate library program commented, during a class in which I was the guest lecturer recently, that it seemed to her special librarians have been grappling with the “value” and “cost/benefit” issues at least since the mid 1970s. She couldn’t understand why it was taking the profession so long to come to grips with what was obviously an issue of vital importance. What is our hangup? We’re waiting for someone else to do the work, wave the magic wand, and give us ammunition to fight the fight on our personal battlefield. We adopted the same tactics with the image issue, asking our professional associations to wage broad-based campaigns to improve the image of

librarians. It didn’t work then, to assign the responsibility to anyone other than ourselves, because each one of us, individually, operating on our local turf, is responsible for the image we convey. It won’t work with the value issue either.

During the Research Forum sponsored by the Special Libraries Association earlier this year, practicing librarians chastised academic researchers for conducting esoteric research rather than research with practical applications and absolute answers to the question “What value does a corporate library bring to an organization; what impact does it have on the bottom line?” There are no definitive, generic answers that will apply satisfactorily to all circumstances in all locations.

Special librarians continually maintain that they don’t have the time nor the expertise to conduct research in addition to fighting the daily battles to stay employed. Prioritize and make time. Don’t call it research, if that concept is too heady for you. Call it intelligence gathering. Collect evidence of the value of what you do. Keep records of situations in which the library saved a key decision maker time, provided information which helped avoid a costly mistake, alerted management to actions of a competitor, noted a trend in an industry, connected an internal researcher

with an external expert, or any of a host of other services which provided value and had an impact on the bottom line. Avoid the trap of statistics gathering. No one will be interested in the fact that you answered ten questions today, performed five online searches, and arranged for delivery of twelve documents not currently in your collection. There is no evidence of value or impact inherent in those statistics. Periodically, "dump" your file of examples on the desk of the purse string holder, whether literally and in person or via electronic messages.

Fatal lack of understanding? It's out there, but on which side? Do "they" not understand the value we bring to the table? Or do we not understand management's own fight for survival? Reality is undoubtedly a combination of the two. Be integrated in the organization and so well connected to the corporate political strength that you have a vivid understanding of the decisions being made on high. Get a grip on management's reality, at the same time you convey to them the reality you represent. The bottom line is to convince corporate managers that even though information may not be their core business, information is at the core of their business and their competitive advantage in the marketplace.

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Thermochemical Data of Pure Substances

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Ihsan Barin, Ph.D., ZEUS GmbH, Duisburg, FRG

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From the Reviews of the Previous Edition...

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— Faraday Transactions

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SCI-TECH NEWS BEGINS ITS FIFTIETH YEAR

by Ellis Mount

Not many of our present readers were around in September 1946, and, according to records at SLA Headquarters, only eleven of our current 2600 readers were members of the Sci-Tech division at that time. At any rate, that was the month that *Sci-Tech News* was first published. Now this issue marks the beginning of its 50th year, identified as volume 50 number 1.

We felt this called for special attention and some activities out of the ordinary to celebrate this gala year. These events will be announced to you as the year progresses.

People are used to having one day in the year as a birthday, but *Sci-Tech News* will have all year (the period in which our next four issues will be published) in which to celebrate! This issue will include a few special items, and more events to mark this special year will take place at the SLA Annual Conference in Boston in June.

Thanks to SLA Headquarters, we are able to list our present members who were members of the Sci-Tech Division at the time the first issue of *Sci-Tech News* was published:

<u>Name</u>	<u>Date Joined SLA</u>
Kate O. Barcus	12/31/39
Vera O. Chase	12/31/43
Mildred A. Hammond	12/31/41

Ruth L. Jackson	12/31/46
Pauline Whitlock Jennings	12/31/43
Loretta J. Kiersky	12/31/42
Laurel D. Meyerhoff	6/40/45
Maria E. Michal	12/31/46
Samuel Sass	12/31/43
Dorothy B. Skau	12/31/44
Milton Wenger	12/41/42

Predecessor Publications

A thorough history of *Sci-Tech News* and miscellaneous publications which preceded it is found in the detailed article by Alfred A. Beltran, published in a 1968 issue of *STN* (1). He points out that the Technology Group was formed in 1923 (one of the earliest formed within SLA), later to join another group and become known as the Commercial-Technical Group. This lasted until 1933 when a split occurred, and the Science-Technology Group was created.

Beltran states that the group usually issued two informal mimeographed bulletins per year. They were unnumbered and had no regular features, but they served as preparation for the appearance of a numbered publication now known as *Sci-Tech News*.

Chronology of Volumes

An invaluable summary of the highlights of all issues since our birthday

has been prepared by the current Archivist of the Sci-Tech Division, Janet Hughes, Life Sciences Library at Penn State University. Most of this summary is based on her history of all *Sci-Tech News* issues published to date. She did a truly remarkable job of gleaning pertinent points of interest.

Editors:

A total of fifteen members have served as editor of *STN* in its 49 years to date, summarized as follows:

Chronology of *STN* Editors

Sept. 1946-Dec. 1947	Lucy O. Lewton
Jan. 1948-Dec. 1948	Gertrude Schutze
Dec. 1948-Dec. 1951	Allen G. Ring
Mar. 1952-June 1952	Ruth T. Power
Sept. 1952-Dec. 1952	Alberta M. Barkley
Mar. 1953-Sum. 1958	Lois Brock
Fall 1958-Fall 1960	Gordon E. Randall
Wint. 1960-Spr. 1962	Frank Bennett IV
Sum. 1962-Spr. 1964	Fenton Kennedy
Sum. 1964-Sum. 1967	Gordon E. Randall
Fall 1967-Wint. 1971	Rocco Crachi
Spr. 1972-Fall 1973	Gabriele Wohlaue
Jan. 1974-Apr. 1976	Rod Casper
July 1976-Apr. 1980	Susan B. Crowe
July 1980-Apr. 1982	Barbara Magnuson
Aug. 1982-Oct. 1989	Robert M. Ballard
Jan. 1990- ?	Ellis Mount

Although *Sci-Tech News* is only one of many SLA-sponsored serial publications, it holds a special place in the minds of thousands of SLA members for whom it has been the bulletin that dealt with the subjects, the sources of information, and the sci-tech librarians of greatest interest to them. Over the years seemingly a score of SLA divisions and sections at one time or another served as

sponsors of this publication. They came and went, but *STN* went on regardless of the names and sizes of the groups who sponsored it.

As can be seen from the summary which follows, all through its history *STN* has seen a variety of departments or features created, lasting perhaps for decades in some cases or fading out of existence in a relatively short time. The editors of *STN* have not lacked for a spirit of innovation, trying to keep up to date with new developments and new topics of interest to the readers.

The 1940s

How many of you know that *Sci-Tech News* was not the journal's title until March 1949 (v.3 no. 1)? It began life as *Ye Alchemical Libraries Almanack: being the bulletin of the Science-Technology Group*! Its first editor was Lucy O. Lewton. There was no charge for copies in 1946, and circulation reached 1,800 in 1947. But in 1948 rising costs led to instituting a charge of \$1.50 per year, a period when annual salaries for head librarians ranged from \$2,400 to \$12,000. Circulation dropped as low as 300.

In 1949 the bulletin's title became *SCI-TECH NEWS: the official bulletin of the Science-Technology Group*.

The 1950s

By 1950 a total of 370 copies were being published, and the sponsorship changed in September of that year from Science Technology Group to Science-Technology Division. About that time such features as "Current Articles of Interest" and "Selected Abstracts" were being included, becoming a separately

published publication in 1952. The first photograph appeared in 1951.

A series of other designations of sponsoring sections and divisions began in 1953. That year the Metals Section was granted a provisional division status. In 1955 the Paper Section was added to the Science-Technology Division.

The continued importance of abstracts and reviews of the literature was evident in the publication of an author index to all abstracts published in volumes 1-8, covering 1946-1954. In 1958 "Selected Abstracts" became "Documentation Digest" and a new section entitled "Science-Technology Serials" was inaugurated.

At that period subscriptions were reduced to \$1.00 per year, followed by a decision in 1957 that members of the Division would receive free subscriptions, with a \$3.00 per year cost for non-members. This bargain price was reduced even more in 1958 when it became \$1 for such readers.

The 1960s

This decade saw many changes in the nature of the sponsoring divisions and sections. In 1964 the Nuclear Science and Aerospace Sections were officially added as sponsoring divisions, and by then the other supporting sections included Paper & Textiles, Petroleum, and Pharmaceutical. In 1965 several sections (Aerospace, Engineering, Nuclear Science, and Petroleum) became Divisions, and the Pharmaceutical Section was granted conditional Division status.

In 1967 the Chemical Section became a division, while the Documentation Division became a sponsoring division. It was a period of

many changes in section/division status. In 1969 the Astronomy librarians petitioned to become part of the Sci-Tech Division. Later that year the Public Utilities section became a division and continued to sponsor *Sci-Tech News*.

In 1963 the "Science-Technology Serials" section was dropped, and in 1965 the "Documentation Digest" was discontinued. One new feature at that time was the appearance of advertisements in 1960. Subscriptions rose a bit for non-members, up to \$2.00/yr. The first advertising manager was not appointed until 1961, which led to improved financial conditions.

A call to Gordon Randall, who served as editor (1958-1960 and again 1964-1967) in preparation for this summary brought a ready willingness on his part to send this brief message in honor of the occasion:

"During the 1960s when I was the Chairman of the Science-Technology Division and subsequently served as the editor of *Sci-Tech News*, I worked hard to make it the best publication I could. I eventually realized that the publication had built for me a reputation far in excess of anything I thought possible or deserved. In 1996 it will celebrate its 50th year of publication. The quality of the publication merits celebration." (2)

It should be noted that Gordon won the first Sci-Tech Publication Award. He is credited with having brought about many improvements in the style and value of *STN*, including lively articles and even humor.

The 1970s

In 1970 the last of Sci-Tech groups, the Paper section, was dissolved. As for

features in the publication, Carmela Carbone began editing a section known as "New Engineering Serials." Otherwise it was a period of relatively quiet times.

The 1980s

Early in the decade Robert M. Ballard became editor, a post he was to hold for eight years. *STN* continued to meet the needs of sponsoring SLA divisions under his editorship.

The 1990s

Beginning with the first issue of 1990, Ellis Mount became editor, a position which he holds at this time. In January 1991 a new department was added—Conference Literature, edited by Marsha Wilson, later changed to a calendar of meetings and conferences of interest to *STN* readers. In August 1991 a new section was added, namely Electronic Media Reviews, edited by Ron Buchan.

One event of interest occurred in August of 1994 when the Metals/Materials Division became the fifth sponsoring division, joining previous supporters—Aerospace, Engineering, and Nuclear Science.

Summary

It is apparent that over several decades *Sci-Tech News* has played a conspicuous role in the life of many sci-tech librarians—its nature has changed, its supporting divisions and sections have changed, and its efforts to keep abreast of the needs of its readers continue.

As have my predecessor editors, I consider it a privilege to serve in this post. I will always welcome hearing from readers, whether they see ways of doing things better or perhaps have ideas for new features we should incorporate. Please keep in touch whenever the mood strikes you.

References:

1. Beltran, Alfred A. The history of a journal: thirty-four years of *Sci-Tech News*. *Sci-Tech News*. 22(4): 99-102; 1968 Winter.
2. Randall, Gordon. Personal communication. Dec. 8, 1995.

SCIENCE-TECHNOLOGY DIVISION

The objectives of the Science-Technology Division shall be: to draw together those members of the Special Libraries Association having an interest in the role of library and information science as applied to the recording, retrieval and dissemination of knowledge and information in all areas of science and technology; and to promote and improve the communication, dissemination and use of such knowledge for the benefit of libraries and their users.

FROM THE CHAIR

CATHY WILLIAMSON



GREETINGS AND HAPPY NEW YEAR!

It's a pleasure to welcome in 1996, particularly because this year marks the 50th Anniversary of *Sci-Tech News*!

The Science-Technology Division is proud to be a sponsor of this publication and congratulates all of the editors who have contributed to its success. This first issue of the 50th volume illustrates that *Sci-Tech News* is still evolving and increasing the quality of information provided to its members. A special congratulation to Ellis Mount for his enthusiasm and continuing efforts at improving the quality and financial stability of our Division's bulletin.

BOSTON CONFERENCE

Make Boston your "pathway to the 21st century"! Here is your chance to learn about new technologies, how information will be used in the future and changing roles of Sci-tech information professionals. Take a look at the exciting programs this division is sponsoring in

Boston. A complete schedule of programs can be found following this column.

Don't miss science fiction author, David Brin, for a glimpse into the future. Whether you are a sci-fi follower or not, this session should stretch your imagination! Are you interested in improving the quality of information provided to your clients? Attend the session on patent searching after GATT and NAFTA and be sure to sign up for our CE course: "Patent Searching in Science and Technology." Are you trying to stay current with new trends? Learn how to create your own "home page" on the net and find out how sci-tech information professionals' roles are changing as they actively contribute on corporate project teams. Join Roosevelt Thomas for a new look at managing diversity and join your colleagues at the standards, computer science literature and academic sci-tech librarians' roundtables. In case you are unfamiliar with roundtables, these are excellent opportunities to network with similar information specialists, learn about practical solutions to real problems and to get first-hand knowledge of new vendor products and services.

If you are a **newcomer** to the conference, please join us at the Newcomer's Brunch and learn "how to get the most out of the conference," as well as learn about our Division.

Everyone is invited to help us celebrate the 50th Anniversary of *Sci-Tech News* at our annual business meeting. Watch for future news about special drawings and a contest! Remember to save time for some socializing. Between the joint evening reception, the special Computer Museum reception honoring the 50th anniversary of Linda Hall Library and the IEEE Computer Society and the Boston High Tea, you may need to begin a vigorous exercise routine following the conference. The finale is an all day tour to the MIT libraries, the MIT Media Lab and the Lotus Corp. library. Plan ahead and get your registration in early. We think these events will be very popular! A special thanks to Sandy Moltz, who has done a wonderful job coordinating these programs, well in advance.

She and I will be finalizing the plans at the winter conference in late January. If you have additional suggestions for the Boston conference or would like to help, contact: Sandy Moltz, Conference Planning Committee Chair, ssm@pdd8.ae.ge.com.

SCIENCE-RELATED DIVISION NEWS

Aerospace Division

As mentioned in the November issue of *Sci-Tech News*, the Aerospace Division is trying to decide about its future. Mitzi Rinehart, Aerospace Division Chair, contacted me recently and indicated that her division is investigating the possibility of merging with either the Science-Technology Division or the Engineering Division. The Aerospace Division will be voting on this issue in March.

Since the Science-Technology Division encompasses a wide range of science and technology disciplines and

members of our division became the original founders of the Aerospace Division, we would certainly welcome Aerospace members back into the division and encourage them to continue their networking opportunities by establishing a section or roundtable for Aerospace. I look forward to working with Mitzi at the winter meeting and hope her membership will seriously consider joining our Division.

Proposed Health Sciences Division

A petition for formation of a Health Sciences Division will come before the SLA Division Cabinet in Cleveland. Laurie Fornes, temporary chair of the proposed division, has submitted a petition with 100 signatures of SLA members, a proposed list of officers, bylaws and a scope note. The petition states that the "scope of the Health Sciences Division encompasses the many diverse aspects of the health care field, including but not limited to: hospitals and health care systems, medicine, nursing, allied health, veterinary science and consumer health. The division provides a forum for the exchange of information and ideas among its members." If you have comments about this proposal, please submit them to the Sci-Tech listserv or to me at cathyw@norfolk.infi.net.

NEWS FROM THE WINTER MEETING

At the 1996 Winter Meeting in Cleveland it was decided that the Division Cabinet Chair will appoint a committee from members of the Division Cabinet to resolve concerns among existing divisions and potential divisions which have a

common interest in health care topics and to bring a recommendation on “units” to the Division Cabinet in June 1996.

The Sci-Tech Division has asked to have a representative on this committee due to its interest in library and information science as they apply to all aspects of science and technology.

In addition, the Division Cabinet asked that the Board of Directors appoint a special committee to examine the processes and procedures governing units of the Association. This committee will examine current bylaws and guidelines as they relate to forming divisions, sections, and caucuses.

PROFESSIONAL DEVELOPMENT

1996 marks the beginning of the Division’s professional development courses. Our first CE course will be “Patent searching in science and technology,” offered in Boston on Thursday, June 13th from 9:00 a.m.-4:00 p.m. Lucille Brown, from LBJ Associates, is an experienced patent searcher and instructor. She will present searching techniques to improve retrieval of patents, discuss recent international agreements and their effects on patent searching, and identify sources for patents in various formats. Sign up early—there is only room for 25 participants! If you have suggestions for future regional or annual CE courses or would like to volunteer to help with planning, contact Marsha Wilson, Professional Development Committee Chair, mjw@corpus.dnet.hcc.com.

SLA continues to expand its educational programs. In addition to courses at the winter education and annual conferences, SLA provides Middle Management Institute courses throughout the

year, will provide another distance learning program scheduled for April, and a self-study program covering communication, financial management, library management and technology. For additional information contact Tracy Lofty at SLA Headquarters, or tracy@sla.org.

ACTION ITEMS

Membership Survey

We need your feedback!!! As part of the strategic planning process, the Division will be sending you a survey in late February. If you do nothing else for the Division this year, please take a few minutes and provide us with your ideas. Your input is absolutely critical for the success of the Division. This is the first Division survey in the past five years and it will help us understand your needs. If you are interested in helping with analyzing the survey results or helping with strategic planning, contact Laurie Scott, Strategic Planning Committee Chair, at scottl@candu.aecl.ca

Nominations for Awards

The applications for the S. Kirk Cabeen Student Travel Award and the Unemployed Librarian Award are due on March 15. For additional details, see the November issue of *Sci-Tech News*. It is not too late to nominate a candidate for the International Librarian Award or the Sci-Tech Achievement/Leadership Award. Help us provide an opportunity for a librarian outside of the North America to attend the Boston conference and help us recognize one of our many talented members for their professional achievements. If you are interested in working with awards or need more information, contact Laurie Allen at lallen@world.std.com

SCI-TECH MEMBERS IN THE NEWS

Although you may have seen these announcements in the *Specialist* over the past few months, I think they deserve an additional Congratulations from the Division!

* **Gail Clement** - published *Science and technology on the Internet: An instructional guide*. Internet Workshop Series Number 4. San Carlos, CA: Library Solutions Press; 1995. 228p. ISBN 1-882208-12-9.

* **Monica Ertel** - appointed Director of Apple's Advanced Technology Group (ATG) Knowledge System Laboratory (KSL). (Past Chair, etc.)

* **Victor Desroches** - received the Agcellence Award for Manager for the Year in Agriculture and Agi-Food Canada.

* **Giuliana Lavendel** - appointed a member of ACM's Library Advisory Group.

* **Sandy Moltz** - received the 1995 George Mandel Memorial Award, administered by the Aerospace Division, at the 1995 annual conference. (Conference Plan. Comm. Chair)

* **Ellis Mount** - published *Special libraries and information centers: an introductory text*. 3rd Edition. Washington, D.C.: Special Libraries Association; 1995. 272p. ISBN 0-87111-437-2. (Sci-Tech News Editor)

* **Bonnie Osif** - received the 1995 Ei/SLA Engineering Librarian of the year award at the 1995 annual conference. (STN Advertising Manager, NTIS Liaison)

* **Ed Valauskas** - appointed Library Fellow, along with eight others, to represent ALA and U.S. Librarianship

overseas in Switzerland. (Past Public Relations Chair)

* **Karola Yourison** - received the 1995 Software Engineering Institute's Excellence Award for excellence in service. (Past-chair, etc.)

The Science-Technology Division consists of many talented information professionals who are highly visible within their organizations and have received recognition both locally and nationally. I am certain that this list only represents a small portion of possible congratulations. Let's keep your accomplishments visible. Please post awards, promotions, appointments, publications/presentations or any other announcements that recognize your value to your organization and the profession on the Sci-Tech listserv, as well as sending copies to SLA. Be sure to note any Sci-Tech positions that you have held in the past, or at least the latest one.

ANNOUNCEMENTS

New International Relations Chair

Chris Olson

Science Reference Librarian

Miller Nichols Library

University of Missouri - Kansas City

5100 Rockhill Road

Kansas City, MO 64110

Phone: 816/235-1281

Fax: 816/333-5584

email: colson@cctr.umkc.edu

Volunteers are welcome to contact Chris directly.

Welcome New Members

We all extend a hearty welcome to new members of the Division. I encourage current members to scan the

New Member list which follows and to identify members who live in your region. Take the time to call them, ask them to join you in attending a local SLA event, encourage them to attend the conference and to volunteer for a committee.

Volunteers Needed

* 1997 Seattle Conference Planning Committee - you can be located anywhere in the country, not just the northwest!

* Federal Library Liaison - looking for someone currently associated with a federal library who can keep the Division advised of issues that relate to scientific and technical information

Request for 1996/1997 Committee Chairs

Please review the List of Appointees (Committee Chairs and Liaisons) below and notify Eleanor MacLean, Chair-Elect, if you are interested in filing one of these positions.

Email and Address Changes

These are changes from the addresses contained in the November issue of Sci-Tech News:.

* Cathy Williamson -

cathyw@norfolk.infi.net

* Howard Stephen McMinn -

hmcminn@cms.cc.wayne.edu

* Laurie Scott - scottl@candu.aecl.ca

* John Sandy - jsandy@ualvm.ua.edu

* David Duggar -

DDUGGA@NOMVS.LSUMC.EDU

Advisory Board - Job Descriptions

Reminder for all officers and appointees to review your job descriptions in the Science-Technology Procedures Manual and to send changes to Karola Yourison by February 28th. Please clarify your major responsibilities and provide some detail, as an appendix if necessary, so that your successor will have a smooth transition.

Sci-Tech Listserv

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ADVISORY BOARD THANKS

I am extremely pleased with the accomplishments of the Division and the hard work of the Advisory Board for the past six months. With corporate downsizing, reduced budgets, increasing workloads, and an ever-increasing demand to keep up with changes in information technology, time for volunteer activity is constantly threatened. Congratulations to all of the current officers and appointees who are listed below. Although I do not mention each person in this column, they are all busy working to support the Division. If any member is interested in volunteering to assist on a committee or would like to find out more about a specific job, contact the individuals listed below. New ideas are always welcome!

**Sci-Tech Advisory Board
Officers and Appointees
1995/1996**

Officers:

Chair	
Cathy Williamson	804/436-8570
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Eleanor MacLean	514/398-4744
Secretary	
Rosanne Macek	408/974-3116
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Jean Piety	216/623-2932
Past-Chair	
Karola Yourison	412/268-7725

Appointees (Committee Chairs/Liaisons):

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Gloria Zamora	505/845-0811
ALA/ACRL S-T Sect. Liaison	
Pat Jameson	414/229-4659
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Networking Committee	
Gad Engler	504/388-8264
Nominating Committee	
Wilda Newman	301/953-5721
NTIS Liaison	
Bonnie Osif	814/865-3697
Parliamentarian	
Bonny Hilditch	301/953-5000
Professional Develop. Comm.	
Marsha Wilson	512/242-4231
Projects/Publications Comm.	
Mary Lee Kennedy	508/486-2540
Public Relations Committee	
Stephen Macksey	312/508-8410
Sci-Tech News, Editor	
Ellis Mount	201/836-1137
Sci-Tech News, Adv. Mgr	
Bonnie Osif	814/865-3697
Sci-Tech News, Bus. Mgr	
Barbara Sanduleak-Parkinson	216/687-1818
Sci-Tech News, Subs. Mgr.	
Suzanne Ogden	214/334-4732
SLA Cat. Committee, Liaison	
Esther Bierbaum	319/335-5711
SLA Stds. Comm., Liaison	
Jean Piety	216/623-2932
Strategic Planning Committee	
Laurie Scott	905/823-9060
Student Relations Committee	
John Sandy	205/348-2111
Teller	
David Charles Dugger	318/675-5472

CALL FOR PROPOSALS
The Projects and Publications
Committee
Mary Lee Kennedy, Chair

The function of the Projects and Publications Committee is to review projects suggested by members and make recommendations to the Sci-Tech Division Board regarding sponsorship and financial support for such projects as the Board approves.

What the above really means is that there is an annual opportunity for information professionals in the Science and Technology fields to be recognized and supported for the pet projects they have been dying to do anyway. So this is the procedure to follow:

Write a brief, two to three page proposal that covers the following criteria:

Sections of the Proposal:

- 1.0 Title
- 2.0 Purpose and enduse, including intended audience
- 3.0 How the project supports the Science and Technology Strategic Plan
- 4.0 How does it supports SLA' s Strategic Plan
- 5.0 The benefit to Science and Technology Members
- 6.0 Project schedule and milestones and costs (including costs to complete the project and costs to maintain it). Please specify costs covered by other sources than those requested by Sci-Tech Division
- 7.0 Project coordinator and contact information

Send or email your proposal to Mary Lee Kennedy by April 15, 1996. All requests will be reviewed by June 1, 1996, with recommendations made to the Board of Directors by the same date.

Mary Lee Kennedy
email mkennedy@rdvax.enet.dec.com
Corporate Library Group
Digital Equipment Corporation
30 Porter Road, LJO2- I4
Littleton, Massachusetts
01460-1427

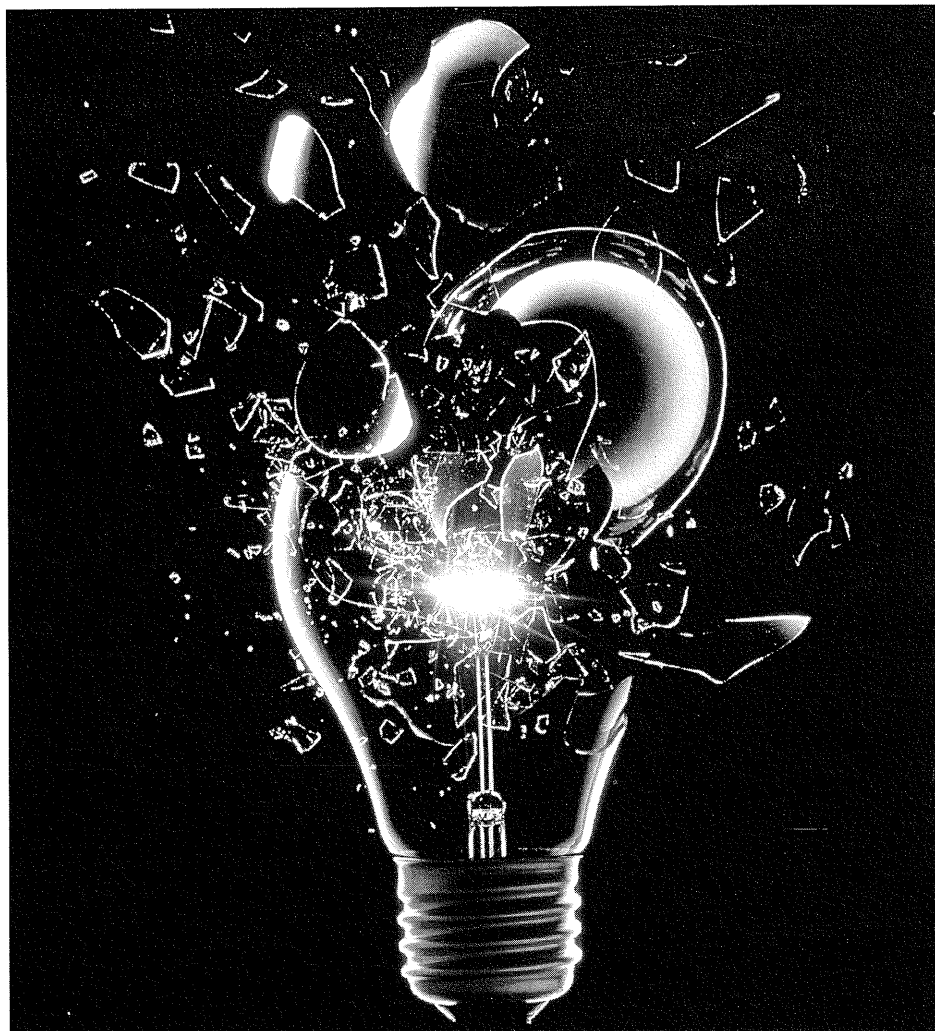
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MicroPatent
Readmore

SCI-TECH DIVISION PROGRAM FOR 1996 CONFERENCE

- Sunday**
June 9 **11 am - 12:30 pm** Newcomers' Brunch
 3 pm- 4:30 pm Sci-Tech Div. Strategic Plan Revisited
 4:30 pm - 6 pm Sci-Tech Div. Board Meeting
- Monday**
June 10 **7:30 am - 8:45 am** Sci-Tech Div. **Annual Business Meeting & Breakfast**
 10:30 am - 11.45 am Patent Searching: The World According to GATT:
 New Patent Laws and Searching. Sci-Tech Div a Co-sponsor
 1:30 pm - 2:45 pm Libraries and the Flow of Information—Fundamental
 Changes in the 20 to 100 Years Ahead—a talk by famous science fiction
 writer David Brin. LEAD DIVISION: Sci-Tech
 3 pm - 4:30 pm Standards Roundtable. Sci-Tech a Co-sponsor
 9 pm - 11 pm Reception. Sci-Tech a Co-sponsor
- Tuesday**
June 11 **9 am - 10:15 am** Academic Roundtable. Sci-Tech a Co-sponsor
 10:30 am - noon Visit the Exhibits
 1:30 pm - 2:45 pm Designing Your Web Page: Standards & Styles.
 Sci-Tech a Co-sponsor
 3 pm - 4:30 pm R. Roosevelt Thomas, Jr. author of "Beyond Race and
 Gender": Managing diversity: an evolving concept. Sci-Tech a Co-sponsor
 4:30 pm - 6 pm Reception to follow program
 7: pm - 10 pm Reception at Computer Museum—50 year anniversary:
 Linda Hall Library, IEEE Computer Society, and ENIAC. Sci-Tech a Co-
 sponsor
- Wednesday**
June 12 **7:30 am - 8:45 am** Sci-Tech Board Meeting & Buffet Breakfast
 11:30 am - 12.45 pm Revolutionary Roles: Information Professionals on
 Corporate Project Teams. LEAD DIVISION: Sci-Tech
 1 pm - 2:15 pm Computer Science Literature Roundtable LEAD DIVISION:
 Sci-Tech
 3:30 pm - 5 pm Boston High Tea. LEAD DIVISION: Sci-Tech
- Thursday**
June 13 **9 am - 4 pm** Patent Searching for Science and Technology CE Course
 8:30 am - 3:30 pm Field Trip to MIT Libraries, MIT Media Lab and Lotus
 Corp. Library - Cambridge, Mass. Sci-Tech a Co-sponsor

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AEROSPACE DIVISION

The objectives of the Aerospace Division are to encourage the free exchange of ideas and information between libraries and librarians who are directly concerned with aerospace technology and related sciences; and to maintain a dialog with NASA and other governmental agencies upon whom we rely as sources of technical data and bibliographic sources.

FROM THE CHAIR

MITZI RINEHART



To be or what to be? That is the question facing our division. Continual changing reflects life. Major corporations are changing constantly in

order to survive and increase their profits. Change is not something we do easily, but it is something into which we, for better or worse, are pulled.

For the last six months we have discussed via *Sci-Tech News* and our listserv the possibilities of merging with another division. This subject should not be a new one to our membership and it certainly has not been taken lightly by our board members.

But, as we constantly change in order to be more productive in our work lives, many of us, I think you will agree, have fewer hours for personal and volunteer activities. The Aerospace Division is a very small, close knit division. It has been, and is, an excellent place to network with other librarians. Just look how the creation of the division listserv has made networking conveniently available to more of our

members, not to mention being helpful in doing reference work.

Merging with another division will not stop our listserv nor the networking we can do with each other. Fact is, it may give us more time to network as many of us can do that instead of the division activities we used to do.

On the first of March you will receive a ballot which will set in motion the initial steps of a possible merger. It will be your chance to vote on the following: Do you want to merge? If so, with which division? And, should we be a section within that division or a roundtable?

If you'd like to review the issue in the days ahead, please read the article written by Sandy Moltz in the November 1995 issue of *Sci-Tech News*. She provides an excellent discussion on the difference between a section and a roundtable.

Let me tell you, too, that merging with another division is not a short nor easy process. If the division, on the March ballot, votes that it wants to merge, it has taken only the first step towards that. The division with which we think we'd like to merge must discuss and vote, too, on the merger.

Please plan to attend the annual division business meeting in Boston on Monday, June 10, if you can. The subject

(of a merger) must be discussed again and then we have to vote on it there. If the vote is in favor of a merger, a final ballot on the issue will be mailed to division members again. And you get to vote again.

So, I hope the process above was not more confusing for you to read than it was for me to write. However, it still ends my "if, if" column.

In the meantime, if you have any comments or questions please contact us with your concerns or post them to the listserv.

Mitzi

PROGRAM CHANGES FOR BOSTON

The following is a correction or revision to the division program for the annual conference in Boston, June 8-13, 1996. The dates for a number of the programs had to be changed. Comments, questions, or requests for information about this should be directed to Sandy Moltz at ssm@pdd8.ae.ge.com by email or at (617) 594-5363 by phone.

Sunday Bird Walk
Lead: Nuclear Division
Co-sponsors: AERO, BIO,
ERMD
6:45 a.m. - ?

Board Meeting
3 p.m. - 4:30 p.m.

Monday Electronic Transmission of
SGML
Lead: Military Division
Co-sponsor: AERO
10:30 a.m. - 11:45 a.m.

Annual Business
Meeting/Luncheon
Noon - 1:15 p.m.

Standards Roundtable
Lead: Engineering Division
Co-Sponsors: AERO, MM,
SCI-TECH
3 p.m. - 4:30 p.m.

Professional Women in
Engineering
and Transportation
Lead: Women's Issue Caucus
Co-sponsors: AERO, ENG,
TRANS
4:30 p.m. - 6 p.m.

Reception
Lead: Military Division
Co-sponsors: AERO,
SCI-TECH, SOLO
9 p.m. - 11:30 p.m.

Tuesday Locating Resources on the
WWW
Lead: Military Division
Co-sponsors: AERO
9 a.m. - 10:15 a.m.

Visit Exhibits
10:30 a.m. - noon

Creating a Home Page
Lead: Information Technology
Co-sponsors: AERO, CHEM,
MIL, SCI-TECH, SOLO
1:30 p.m. - 2:45 p.m.

Board meeting
3 p.m. - 4:30 p.m.

Aquarium Reception
Lead: Military Division
Co-sponsor: AERO, BIO,
ERM, ITE, LMD, SOLO,
TRANS
7:30 p.m. - 9 p.m.

Wednesday Boston High Tea
Lead: Sci-Tech Division
Co-sponsors: AERO, ENG,
FAN, M/M, MIL, NUC
3:30 p.m. - 5 p.m.

Thursday Field Trip (to MIT Libraries,
MIT Media Lab and Lotus
Corp. library)
Lead: Engineering Division
Co-sponsors: AERO, ITE,
SCI-TECH
9 a.m. - 4 p.m.

NOMINEES SET FOR ELECTIONS

Three division members have been approved by the Nominating Committee as candidates for 1996-97 offices, **Elaine Dorschner**, Nominating Committee chair, said recently. They will be running to fill chair-elect and secretary positions. The vacant chair elect position for 1995-96 was filled recently by special election. **Katherine Harkness** was named the winner. She will serve as division chair, too, in 1996-97.

Don Welch, who was elected to a two-year term as treasurer in 1995, will continue to serve as treasurer this year.

Nominated for chair elect in 1996-97 (and as chair for 1997-98) is **Mary Ellen McMurtrie** of Honeywell Defense Avionics Systems. Candidates for the one year position of secretary are **Dobrica Savic** of ICAO and **Janna Jantz** of Lockheed Martin.

Sandy Moltz, **Audrey Bryant**, and **Susan Clifford** were members of the Nominating Committee in addition to Elaine Dorschner. The teller this year is **Sue Stanek**.

Mary Ellen McMurtrie is currently the librarian at Honeywell Defense Avionics Systems in Albuquerque. Previous to that she was librarian at DB Stevens Environmental Engineers. She also has experience in academia, having been employed at the University of New Mexico and the University of Rochester in Rochester, New York. During 1995, Mary Ellen designed a home page for use at home and also installed an online catalog at Honeywell. A member of the SLA since 1985 when she was a library student at SUNY Buffalo, Mary Ellen has been active in several divisions besides the Aerospace Division. They are Engineering, Information Technology, Library Management, and Solo Librarians.

Janna Jantz made a change in careers five years ago, moving in 1990 to Lockheed Martin, formerly Martin Marietta, in Albuquerque. She previously worked as a consultant with Woodward Clyde Consultants and Stearns Rogers both. Since moving to Arizona, she has survived both mergers and acquisitions which involved the company in diversifying and downsizing both. She is experienced, she says, in fighting for resources and learning to deal with everchanging populations. She has been a member of the division since 1990.

Dobrica (Dobie) Savic is head of the library of the International Civil Aviation Organization in Montreal, Canada. Previous positions for him include UNESCO expert in documentation (in

France), documentalist/librarian (in Sierra Leone), and deputy director of the Yugoslav Centre for Scientific and Technical Documentation. He has a MPhil in Library and Information Science from Loughborough University of Technology in England and an MA and BA in International Relations from Belgrade University in Yugoslavia. A member of the SLA since 1993, he also is taking courses towards a PhD in Library and Information Science at McGill University.

For more on Dobrica, who developed and maintains the ICAO's web site, connect to a personal home page he created at <http://www.cam.org/~dsavic>.

LISTEN ...IT'S LISTSERV

For those new to the division, or for those who just got linked to the web, please note that the division has a listserv expressly for communicating / networking electronically.

Members who wish to subscribe to the listserv, which is hosted through the auspices of the NASA Scientific and Technical Information Program Office, should send an email message to:

listserv@sti.nasa.gov

that says in the text:

subscribe SLA-aero <yourfirstname
yourlastname>

The subject line of the message header should be blank.

An example of this would be:

subscribe sla-aero Sally Ride

A confirmation of the registration will be sent to you via email.

Once you are subscribed then you can send messages to everyone in the

division by addressing, and sending, the messages to:

sla-aero@sti.nasa.gov .

The listserv does not have a moderator so messages will be distributed to all of the subscribers registered. (In the middle of January, there were 157 subscribers, three less than in October 1995.) So ... careful what you say.

THE TREASURY

Despite a lack of revenue from publications and/or shirtsales, the division finished 1995 "in the black," division treasurer Don Welch recently reported. He added that after preparing a report on 1995 finances for the SLA he could say that the division was healthy financially.

The division has, by account, the following:

\$3,710.46	in Checking
\$8,931.78	in Savings
\$3,622.51	in GMMA account

The division finished 1994 with \$14,668.97, which is almost \$1,600.00 less than the \$16,264.75 left in 1995. The two major sources of revenue for the division were (1) donations from corporate sponsors and (2) the SLA's annual allotment to the division.

Donations from corporate sponsors in 1995 were \$1,250.00. The SLA's allotment was \$2,064.00. The division also received \$70.00 for the sale of publications and \$70.00 for division T-shirts.

A little more than \$1,100.00 was spent planning and holding activities either in preparation for or at the 1995 annual conference in Montreal, Canada. The division also made an \$840.00

payment to cover its share of Sci-Tech News publication costs.

Don said that he contacted the SLA about the division's accounts, and what would happen to them should the Aerospace Division merge with another division, and Joy leaner told him that "assets and liabilities would go with the merge." The divisions, she said, "would combine all of that."

PASS THE PAPERS, PLEASE

Seven papers addressing the use, organization, or delivery of technical aerospace related information were presented in January at the 34th Aerospace Sciences Meeting and Exhibit in Reno, Nevada, January 15-18. The chair of the session featuring the papers was Harold Kohn of EDS Corporation, Herndon, Virginia.

The papers were:

"The Technical Communications Practices of Engineering Technology Students : Results of the Phase 3 Student Survey" / by M. England of North Dakota University, T. Pinelli of NASA Langley, and J. Kennedy of Indiana University. (AIAA Paper-96-0836)

"A Comparison of the Technical Communications Practices of Japanese and U.S. Aerospace Engineers and Scientists" / by T. Pinelli of NASA Langley, K. Holloway of the AIAA, R. Barday of Rensselaer Polytechnic, and J. Kennedy of Indiana University. (AIAA-Paper 96-0837)

"The NAS Computational Aerosciences Archives" / by K. Miceli and A. Globus of NASA Ames. (AIAA-Paper 96-0838)

"Desktop Delivery of Full-Text Information" / by M. Ambur and D.

Adams of NASA Langley. (AIAA Paper 96-0839)

"A Reporting Tool for Research Transition" / by D. Nixon and A. Halliday of Nwing Inc. (AIAA Paper 96-0840)

"Internet Servers : Organizing Collections for Information Discovery and Retrieval" / by K. Marsh of Information Access Institute. (AIAA Paper 96-0841)

"Using Virtual Environments to Organize World Wide Web Information" / by S. Ressler of the National Institute for Standards and Technology. (AIAA Paper 96-0842)

STRAIGHT AERO

By Don Welch

People are picky. They have preferences, and they will express them more often then not, don't you think?

I think that's true ... particularly when there's money, or theology, on the table. You start talking about spending money, or changing theology, and people usually have a preference that they'll share with you. If it's their money or their theology that you're discussing, I know they will.

Well, that's kind of what we're doing when we talk about merging the Aerospace Division with another. Your money and my money bought each of us, individually, memberships in this division. As consequence, I'm interested in what the division does. Are you?

I have a preference about merging, and it's one of many. It is not hair-raising or hair washing either (because it's not made by Loreal). It's just what I would prefer if the decision was left to me ... which obviously it is not.

Still, I have a preference, and all of you do, too. Now, we need to find a consensus and go with that. We may find most of us don't want to merge. We may find otherwise.

I took a look at a membership list of the division and I learned, after some scrutiny, that we are split almost in half in members that belong only to one division—the Aerospace Division—and those that belong to two or more. Of those with two or more division affiliations, there are 45 with just two. Forty have three; 15 have four. The average of those with two or more is 3.256. A couple of members, however, really make the average high. One belongs to 15 divisions, and another belongs to 16.

What does that tell us? Not much, really. One thing it says to me is that most of us can afford only one affiliation. Outside of that, I'm not sure what it says.

What was really interesting was to look at what divisions, in addition to the Aerospace Division, members found beneficial to join, assuming, of course, that an affiliation meant membership was beneficial.

I found that 35 members also belonged to the Engineering Division. Thirty-four belonged additionally to the Information Technology Division. Next came 31 who belonged to Science-Technology, 23 to Library Management, 20 to Military Librarians, and 18 to Business & Finance. That means that eight of 52 members belong to the Engineering Division, eight of 54 to Information Technology, eight of 59 to Science-Technology and eight of 80 to Library Management. Isn't that interesting?

Three of the six divisions listed above have been mentioned on the division listserv as possible merger candidates. They are Engineering, Science-Technology and Military Librarians. Some that were mentioned as candidates and did not make the list of affiliations were Transportation and Metals/Materials. Transportation had seven members affiliated and Metals/Materials had eight.

One final observation—the primary division affiliation of members was, of course, the Aerospace Division, with 173. That means that there are 56 members, as of July 1995, whose primary division was not the Aerospace Division. Of those 56, 10 were affiliated first with the Engineering Division, seven to Business & Finance, six to Information Technology, six to Library Management, six to Military Librarians, and five to Science-Technology. That's interesting, too.

Well, enough of “the numbers.” The following are some excerpts on comments collected from the division listserv:

With membership dwindling and the division seemingly reliant upon a handful of people to run it, “the synergy for getting new perspectives and fresh points of view is lessened.”—Dottie Moon

“Please do not merge. ... I will run for office, if needed, and will work hard.”—Stan Elman

“I'm grateful to all those who have worked so hard to keep things going. Since I'm in no position to volunteer time and effort to keep the division going, why should I expect anyone else to do so?”—Vicki Schneller

“I think the Aerospace Division needs to merge with another division ...

Because members have many different interests, I think we'd fit better as part of a large, diverse division such as Engineering or Sci-Tech rather than another small division. My preference is the Sci-Tech Division because that's where the Aerospace Division began as a section."—Sandy Moltz

"I don't want to merge, but, if we do, my choice would be Sci-Tech or Military."—Stan Elman

"It's hard to give up on being a separate division, but the times may dictate that as a necessity, and we can hope that one day in the future we will be able again to break out on our own."—Kay Salm

"... It's not fair to expect a handful of people to do a division's worth of work. I would opt for a roundtable with either Engineering or Sci-Tech."—Rita Reisman

"Just because the times for aerospace librarians are difficult now is not a reason to disband. It is precisely when the times are tough that aerospace librarians ought to be turning to each other for help and

maintaining an organization that looks after their specific interests."—Stan Elman

"As current chair of the Consultants Section of (the Library Management Division), I like the section status. We need only two officers and we contribute to the newsletter and (planning) for conference."—Peggy Carr

"Maybe the current officers need to start mentoring members to be future officers. Sure there are lots of people who just don't want to be in the spotlight, but there are others who, with just a little encouragement, would accept the challenge. Yes, I'm tired and overworked (like everyone), but I find energy in working with others in my profession."—Mary Ellen McMurtrie

"I believe we should merge with Engineering or Sci-Tech, and become a roundtable within one or the other of them. I am one of the silent majority, belonging but not really participating, so I understand how difficult it is to find people to do the work of running a division."—Donna Atkins

People do have preferences.

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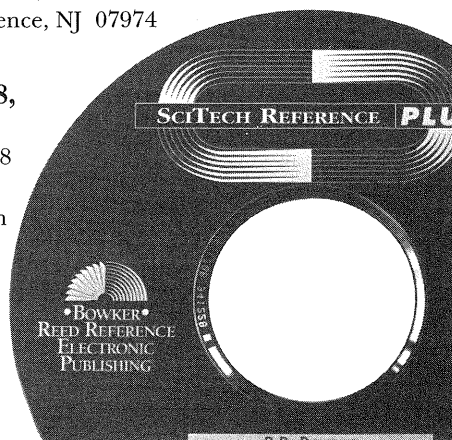
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SCIA



ENGINEERING DIVISION

The objectives of the Engineering Division are to provide an association for those having an interest in library and information science as they apply to engineering and the physical sciences and to promote the use of materials and knowledge for the benefit of libraries and other educational organizations.

FROM THE CHAIR

PETER S. MOON



INSPEC AWARD

There is a change of personnel for the Scholarship Committee Chair. Mary Ann Schmidt resigned from this position in November. The

new chair is: Bette Finn from Georgia Tech Library and Information Center. Welcome, Bette! As her primary objective, she will be organizing the Student Services Program and soliciting entries for the Stipend Award. This award was issued by Inspec last year. (For a fuller account of the award, see page 3.)

NOMINATIONS

Remember we are coming up on nominations. If you are interested in filling one of the division officer positions (Chair-Elect, Treasurer or Secretary), contact Estelle Davis at: esecc@cunyvm.cuny.edu (tel: 212-650-8246; fax: 212-650-7626).

BOSTON CONFERENCE EVENTS

Among the events being planned on your behalf at the Annual Conference is a tour of two places. At the request of others in the division for a corporate library as well as an academic library, Thursday morning we are scheduled to tour through the MIT Engineering (Barker) Library as well as the Aerospace and Architecture Libraries. This will be followed by the MIT Media Lab at lunch-time. In the afternoon, we will travel to Lotus Development Corporation to see a presentation of their "virtual library" and have an opportunity to ask questions. Space will be limited, so please sign up early if you are interested in going. Engineering Information, Inc has kindly offered to support this event financially.

In addition, there will be sessions at the Annual Conference on both ISO 9,000 and 14,000. Many may be aware of ISO 9,000 for the quality of manufacturing products in Europe, but any company in the USA or elsewhere, planning to sell in Europe also needs to know about 9,000 and to have a general sense of the impact of this development has on business practices. Fewer people are familiar with ISO 14,000, but it will

have just as profound an impact on business. It deals with the development of environmental standards for business products, services and methods. Engineering is co-sponsoring this with the Environment and Resource Management Division. Take a look at the "Environment and Business" session.

COPYRIGHT

I strongly recommend that each member of the Engineering Division concerned about copyright obtain a copy of the "Intellectual Property and the National Information Infrastructure—the report of the working group on intellectual property rights." This white paper was issued by Bruce A. Lehman, Assistant Secretary of Commerce and Commissioner of Patents and Trademarks, Chair and Ronald H. Brown, Secretary of Commerce, both are Co-Chairs of the Information Infrastructure Task Force (Sep 1995) ISBN: 0-9648716-0-1 **Single copies of this report may be obtained, free of charge**, by sending a written request to: "Intellectual Property and the NII" c/o Terri A. Southwick, Attorney-Advisor, Office of Legislative and International Affairs, US Patent and Trademark Office, Box 4, Washington, DC 20231. Copies will also be available from the IITF Bulletin Board. The bulletin board can be accessed through the Internet by pointing the gopher client to iitf.doc.gov or by telnet to iitf.doc.gov (log in as gopher). The bulletin board is also accessible at 202-501-1920 using a personal computer and a modem.

Although it is an extensive 257 pages in length, this report is well designed with a useful table of contents to maneuver around it. Over 150 pages are focused on copyright, the remaining portion focused on patents, trademarks and three appendices: proposed legislation; statutory mark-up; and participating agencies. Copyright in the context of NII and the GII are an integral part of the report.

Since anyone has the potential to be an author/publisher using the Internet with a built-in, tremendously large audience, we as information professionals, known for our skills of gathering, evaluating, organizing, storing, retrieving and disseminating, at least need to exercise the first half of these skills with the new technology. We have a major concern on how the copyright legislation will impact us and need to respond to this challenge. It is imperative that each of us learn what this document contains as well as other related documents and act upon it for our professional survival.

ENGINEERING DIVISION LISTSERV

Remember to sign up for our division listserv at: majordomo@iee.org.uk To subscribe leave the subject line blank and in the body of the message type: subscribe sla-eng (on another line, type) end Then to send messages, type sla-eng@iee.org.uk To see other SLA related listservs and home pages, check the Who's Who Directory for pages 38 and 39 or go into: <http://ils.unc.edu/SLA/home/sla95.html>

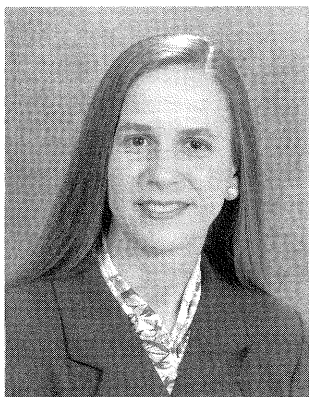
METALS/MATERIALS DIVISION

Members of the Metals/Materials Division share information concerning all phases of metals and materials procurement, production, properties, applications and handling by means of educational activities, cooperative programs, publications and Division-sponsored events at annual conferences.

METALS/MATERIALS DIVISION

FROM THE CHAIR

TANYA BARBER



CONFERENCE PREVIEW

Work has been going on behind the scenes planning for our Annual Conference in Boston, to be held June 8-13. Entitled

“Information Revolution,” it forges a “Pathway to the 21st Century.” Patricia Cromi and I traveled to Cleveland in late January where division planners finalized program plans for the Boston conference and started them for the Seattle conference.

It's worth taking the time now to start blocking out the events you put in the “must” category if you plan to attend that meeting. Once you are there, it's harder to pick out what sounds best in the fast-paced conference atmosphere. Some activities to look for include:

Sunday, June 9

Mark your calendars! On this day the Board of Directors will meet at 3:00 pm. Topics of the meeting will include an update on any actions taken by the SLA Board of Directors affecting the division, reports from Division officers, an overview of the events of the conference, and

other matters as appropriate. All members are welcome to bring questions and topics for discussion to this meeting. After the Board meeting you can explore the culinary and entertainment offerings of the Boston area.

Monday, June 10

This will be a busy day for division activity. We begin in the morning (10:30-11:45) with “The World According to GATT—New Patent Laws and Their Effects on Searching.” Martha Crockett Sneed, a U.S. Patent and Trademark Office representative, will begin the program with an overview of the major changes in United States patent law arising from GATT and NAFTA. Then David Brown, of Knight Ridder's Dialog Information Service, will discuss how these new laws will affect patent searching. Knight Ridder and Derwent have generously offered to sponsor this session. Co-sponsored with S-T.

The afternoon's Standards Roundtable (3:00-4:30) will provide a forum for sharing problems and solutions in identifying and procuring standards and specifications. The primary focus this year is the ISO 9000 series. Co-sponsored with ENG, AER, and S-T.

We end the day (6:00-9:00) with what has become an annual tradition

for Division members and nonmembers alike our Dutch Treat Dinner. This year local chapter members will lead us to one of their favorite restaurants in the historic Marketplace district. Sign up for the dinner by 2:00 pm so the restaurant will have our seating arranged; a sign-up list will be posted in the message board area. Wherever we may trod—oysters, beans and cod!

Tuesday, June 11

To get our engines revved up, we start bright and early (7:30-8:45) Tuesday morning with our annual business/breakfast meeting. This is an important meeting for the membership to attend and hear about Division activities, actions of the Executive Board, elect officers and meet fellow division members in an informal setting. The minimal cost of this meal function has been made possible by the support of ILI Infodisk. Please be certain to let them know that their generosity is appreciated. Following breakfast, a visit to the exhibit area will complete the morning.

We will be joining the Engineering, Science-Technology, and Information Technology Divisions Tuesday night for a reception at the Computer Museum to celebrate the 50 year anniversaries of the Linda Hall Library, IEEE Computer Society and the ENIAC. The Computer Museum, with a walk-thru personal computer and interactive exhibits located in Downtown Boston, will host this reception from 7pm to 10pm. This is sure to be a popular event and attendance is limited, so place your reservations for it early.

Wednesday, June 12

We will kick off another busy day of division programming with 'Revolutionary Roles: Information Professionals on Corporate Project Teams' (11:30-12:45). For years special librarians have talked about the shift in professional emphasis from "collections" to "connections." Our participation on corporate project teams offers us a great opportunity to further our connections within our parent organizations, and to demonstrate our value-added contributions in some new and exciting ways. Rebekah Anderson (3M Company), Jane Katayama (MIT-Lincoln Laboratory), and Janice Tuttle (Digital Equipment Corporation) will discuss their roles on corporate project teams, identify how they came to be involved on these teams and explore the implications of this involvement for both themselves and their parent organization.

After lunch, find out how to "cut a deal" at the 'Negotiating Vendor Contracts' session (1:30-2:45). Panelists Cris Kinghorn (Citibank), Renee Massoud (KPMG Peat Marwick) and Carol Ginsburg (Bankers Trust) will explain how to negotiate contracts, what can go wrong, and what needs to be done after the negotiations are done. Coordinated by B&F with A&M, IEB, M/M, NUC, PHM, S/L, TLC, and TRN.

Our final conference activity will be held on Wednesday afternoon (3:30-5:00), so don't book your plane flight until you've wound down from all the conference hustle and bustle at the Boston High Tea. Come spend a quiet moment reflecting on the conference while enjoying tea and delicious treats. Coordinated by S-T with AER, ENG,

FAN, MIL, M/M, and NUC participating. Sponsored by Elsevier.

This is just a small piece of what the conference planners have in store for you. For those of you who are debating about attending the conference, I urge you to go. The speakers, sessions, exhibits and events programmed combine to provide unique opportunities for

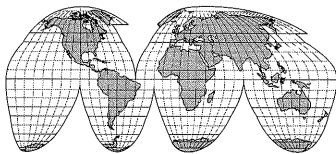
professional development, networking, and learning about new tools, techniques, services and ideas to develop and implement the Information Revolution. And bring comfortable shoes! Boston, one of the country's most walkable cities, is rich in history and culture; we hope you will have some time to take in some of the sights of this world-class city too! Come, I look forward to seeing you all there.



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NUCLEAR SCIENCE DIVISION

The division has a special interest in Nuclear Science and in advanced energy systems such as nuclear, solar, wind, geothermal, and tidal. Its concern in these fields includes, but is not limited to, research, policy and analysis, development and production.

FROM THE CHAIR

It takes more than a handful of members to keep a Division active and to provide worthwhile annual programs, quarterly newsletter articles and to run an electronic bulletin board service. As our corporations downsize and each person takes on a larger load during the work day, then we have dramatically less time and energy for external professional activities. Many of us receive no recognition or encouragement from our employers for engaging in these activities.

Some of these are reasons why the

DONNA BERG

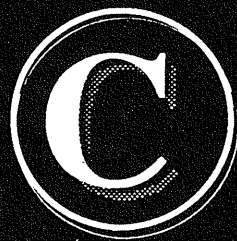
Nuclear Science Division does not see a future for the group in SLA. Decreasing membership and a declining industry have contributed to their dilemma. Currently members are being polled for their ideas to determine what course their Division should take. In the next month we should have input from the members and we will work with Division and SLA leadership toward a positive resolution for Nuclear Science Division.

Donna Berg,
Chair, Nuclear Science Division

Libraries and Copyright: A Guide to Copyright in the 1990s

by Laura N. Gasaway and Sarah K. Wiant

Libraries and Copyright is a must buy. The authors, both experts in copyright and library uses of copyrighted material, cover every aspect of U.S. copyright law that concerns librarians.



- basics of copyright law
- fair use
- reproduction of copyrighted works under the section 108 exemption for libraries
- licensing
- computers, software and electronic databases
- international copyright
- library uses of copyrighted materials

Don't miss this indispensable reference tool.
ISBN 0-87111-407-0, 386 pages \$50.00, SLA members \$40.00.

NEW SCIENCE & TECHNOLOGY JOURNALS

David R. Peck, Editor

*ACM Journal of Experimental
Algorithmics*. ISSN: 1084-6654.
Editor-in-chief: Bernard E. Moret.
Association for Computing Machinery.
Preview and orders at <http://www.jea.acm.org>. Fax: 212-944-1318.
Quarterly. Vol.1, 1996. Subscription
non-members \$119.

Devoted to experimental work in the
design and analysis of algorithms and
data structures. Focus on areas such as
combinatorial optimization, computational
biology, computational geometry, graph
manipulation, graphics, heuristics,
network design, parallel processing,
routing and scheduling, searching and
sorting, and VLSI design. Available only
via http, ftp, or ftpmail on the Internet.
Subscription includes access to full
backfiles and software archives of the
journal.

*Australasian Journal of Engineering
Education*. ISSN: 1324-5821. Editor
-in-Chief: Zenon J. Pudlowski.
Electronic version produced by the
Unesco Supported International Centre

for Engineering Education (USICEE) at
Monash University, and the Monash
University Library. Vol.6, 1995.
Current issue available on the web at
[http://elecpress.lib.monash.edu.au/ajee/jnl
index.htm](http://elecpress.lib.monash.edu.au/ajee/jnlindex.htm)

Provides an international forum for
discussion and information exchange on
engineering education and industrial
training. Reports methodology research
and curriculum development.

Automated Software Engineering.
ISSN: 0928-8910. Kluwer Academic
Publishers. Phone: 617-871-6600.
Quarterly. Vol.1, no.1, Mar 1994. U.S.
institutions \$377. CCC: \$7/article.

Subtitled "The International Journal
of Automated Reasoning and Artificial
Intelligence in Software Engineering."
Research articles dealing with industrial
experiences in knowledge representation,
computational models of human software
engineering activities, study of techniques
for constructing and understanding
software processes and artifacts. Also
includes book and conference reviews.

Autonomous Robots. ISSN: 0929-5593. Editor: George A. Bekey, Univ. Southern California. Kluwer Academic Press. Phone: 617-871-6600. Two issues/yr ; one vol./yr. CCC: \$7/article. Institutional rate: \$268/yr.

Emphasizes systems which make robotic autonomy (ability to move and be self-sufficient) possible, not on manufacturing applications of or techniques for manipulation by robots. Topics such as real-time vision, autonomous legged vehicles, and terrain recognition. Research articles in either applied/ experimental or theoretical areas, essays, surveys and short notes.

International Journal of Virtual Reality. ISSN: 1081-1451. IPI Press. Phone: 719-630-1427. Quarterly. Vol.1, no.1 Winter 1995. Library rate \$450.

Each issue includes a CD-ROM with fulltext of the journal plus graphics, animation, photos, and sound/video clips.

Journal of Hydrologic Engineering. ISSN: 1084-0699. Editor: M. L. Kavvas, University of California, Davis. American Society of Civil Engineers. Phone: 800-548-2723, Fax: 212-705-7300. Quarterly, vol.1, no.1 January 1996. Domestic non-member rate print \$117, carom \$155.

Theories and development of new analytical, numerical, and experimental hydrologic methods and engineering applications in areas including surface water hydrology, hydrometeorology, and soil-vegetation-atmospheric interactions.

Journal of Vegetable Crop Production. ISSN:1049-6467. Editor: M. LeRon Robbins. Haworth Press. Phone: 800-342-9678. Twice a year. Vol.1, no.1, 1995. Library subscriptions: \$75.

Harvesting, planting, shipping, pest control, and consumption of all types of vegetables are covered.

Wireless Networks. ISSN: 1022-0038. Baltzer Science Publishers, Amsterdam. Phone (ACM) 800-342-6626 or Internet <http://www.acm.org/catalog/catalog.html>. Quarterly. Vol.1, no.1, Feb 1995. Non-member subscription: \$90.

Sponsored by the Association for Computing Machinery. Subtitle—the journal of mobile communication, computation, and information. Focus on networking and user aspects of fully distributed mobile computing and communications. Typical topics include wireless LANs, radio, network architecture for Personal Communications Systems, tactical and other wireless networks, and design and analysis of protocols.

New Books for Sci-Tech Libraries

Advanced Materials

ICCM-10: Proceedings of the Tenth International Conference on Composite Materials, Aug. 14-18, 1995, Whistler BC, Canada.

Encyclopedic presentation: Vol. I: **Fatigue and Fracture**, II **Metal Matrix Composites**, III **Processing and Manufacturing**, IV **Characterization and Ceramic Matrix Composites**, V **Structures**, VI **Microstructure, Degradation and Design**. 1-855573-221, Oct. 1995, 4906 pp., each vol. 6x9, laminated sc. \$750.00

Advanced Ceramic Matrix Composites: Design Approaches, Testing and Life Prediction Methods. Editor: Dr. Edward R. Genierazio. NASA Lewis Research Center. Reports by materials specialists. 1-56676-334-7, Nov. 1995, 236 pages, 6x9, sc. \$95.00

Handbook of Polymer Composites for Engineers. Editor: Leonard Hollaway, University of Surrey. Practical introduction to polymer composites: materials, design, manufacturing methods. Case histories illustrate design projects. 1-85573-129-0, 1994, 352 pp., hc. \$135.00

Emerging Engineering Materials: Design, Processes, Applications, Mel Schwartz, United Technologies Corp. Extensive survey of new materials, materials processes and applications: metals, ceramics, polymers and composites. Intermetallics, intermetallic matrix composites, functionally gradient material, carbon-carbon composites, fullerenes and diamond fibers, and nanostructured/nanocomposite materials included. 1-56676-314-2, March 1996, 300 pp., 6x9, sc. \$145.00

Polymer Science/Plastics Technology

Photosensitive Polyimides: Fundamentals and Applications. Editors: Kazuyuki Horie and Takashi Yamashita, University of

Tokyo. The first book on photosensitive polyimides: chemistry, processing and electronic and photonic applications. 1-56676-297-9, Oct. 1995, 338 pp., 6x9, hc. \$145.00

Standard Pressure-Volume-Temperature Data for Polymers, Paul Zoller, University of Colorado, and David J. Walsh, DuPont Co. Extensive compilation of PVT data, presented in tables and graphs, on more than 180 important polymers. 1-56676-328-2, Sept. 1995, 421 pp., 8.5x11, hc. \$245.00

Textile Technology

Advanced Fiber Spinning Technology, Toshinari Nakajima, Society of Fiber Science & Technology, Japan. Illustrated presentation of new fiber materials and processes. 1-85573-182-7, 1994, 268 pp., 6.5x9.5, hc. \$125.00

Wellington Sears Handbook of Industrial Textiles. Editor: Sabit Adanur, Auburn University. New, completely updated edition of a major textile industry reference. Covers Science and technology: materials, properties, manufacturing and finishing methods, and all industrial product areas. 1-56676-340-1, Oct. 1995, 845 pp., hc. \$165.00

More detailed information is available in individual announcements on each of these publications.



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BOOK REVIEWS

PART 1

BOOKS: THEIR ROLE IN SCI-TECH LIBRARIES by Ellis Mount

Society now has at its disposal many forms and formats which provide information that people need. It is not uncommon for a researcher to do a search and end up with computer-based articles, data from CD-ROM disks, periodical articles, technical reports, and books.

In some circles printed matter is dismissed as being out-of-date and essentially of little use, and electronic sources are considered far superior. In other circles traditional printed materials are viewed nostalgically as being a little more intellectual, more lasting in value than electronic sources.

Many people take a more pragmatic view of information sources, so they use whatever seems the best choice for the job at hand. They see that each source has its strong points and its weak points.

As editor, I find myself in the second group of people. I favor using each source available that would best provide the information needed for a search. I have tried to balance *Sci-Tech News* as to its coverage of reviews of what is apt to interest our readers. Thus we have articles about networking techniques, or include reviews of electronic media, and

also include reviews of recent books and new periodicals.

Until a compelling argument comes along to change this policy of featuring a variety of information sources, *STN* will continue to provide information on what's new in several formats.

With this background, it might be considered a logical step to try to provide better coverage on new books. We have found value in the traditional book reviews provided by Ron Buchan and his reviewers, but space does not permit featuring more than a dozen traditional reviews. In an effort to offer more reviews, *STN* will try an experiment, commencing with this issue, featuring 100 abbreviated book reviews, arranged by Library of Congress numbers. They were selected by myself from the columns of a successful book review publication entitled *Sci-Tech Book News*.

Each of their eight issues per year contain hundreds of reviews of sci-tech books. They provide us with a disk with our selections arranged by call number order, featuring succinct reviews. Because they list many more titles than we could use, our selection of 100 titles

means that we cannot select in all fields. Consequently the selections will generally consist of all areas of engineering/technology, physics, chemistry, the earth sciences, computers, and mathematics. This means we cannot select much in the way of the life sciences and medicine. It is hoped that the needs of the greatest number of readers would be met with this selection goal.

Rather than eliminate entirely traditional reviews, each issue of *STN*

will undoubtedly contain a handful of reviews of books that are either of unusual value or else deal with topics worth giving more space.

I hope that this experiment is useful to you. I have no illusion about the limitations we face. We don't want to crowd out other departments and feature articles for the sake of more reviews. It's a balancing process. Please let me know how you feel about it; I'd like to hear from you.

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PART 2

SELECTED BOOK REVIEWS

Ron Buchan, Editor

CHEMISTRY

The most beautiful molecule (the discovery of the buckyball). By Hugh Aldersey-Williams. New York: Wiley; 1995. 350p. \$24.95. ISBN 0-471-10938-1.

This book begins with a look at molecular structure and the application of organic chemistry in developing materials such as drugs, dyes, perfumes, and plastics. The unlimited varieties of molecular arrangements are depicted in diagrams which effectively support the research efforts leading to the discovery of Buckminsterfullerene by Smalley and Kroto at Rice University in 1985.

Verbatim extracts of statements made by chemists and scientists are presented to explain the process of creating the carbon 60 atom mass and the criteria which confirm the unique properties of this substance. The book concludes with possible uses of Buckminster Fullerenes for rocket fuels, lubricants, chemical catalysts, photoconductors, superconductors, and fiber-optic communication. A discovery of "Fullerite" array of stacked spheres which were formed more than 500

million years ago, shows that nothing is new in nature.

Philip N. French
NASA Scientific and
Technical Program

EDUCATION

Distance education (an annotated bibliography). By Terry Ann Mood. Englewood, CO: Libraries Unlimited; 1995. 201 p. \$27.50. ISBN 1-56308-160--1.

Educational opportunities through correspondence courses, televised instruction, radio programs, video and audio cassette recordings, compact discs, and the Internet which can be adapted to meet the students' needs caused by isolation, physical impairment, work requirements, and/or financial constraints are becoming increasingly important. This book meets its intended purpose by providing 297 references which show the organization, location, and type of training provided. The advantages and disadvantages of distance education are examined from the standpoint of (1) the philosophy of distance education, (2) management and administration

procedures, (3) the teacher's role, (4) student considerations, (5) special groups and (6) the international aspects.

Philip N. French
NASA Scientific and
Technical Information Program

MATERIALS

The physics of creep. By F.R.N. Nabarro and H. L. DeVilliers. Bristol, PA.: Taylor & Francis; 1995. 423 p. \$99.00. ISBN 0-85066-8522.

The engineering aspect of creep is defined as a time-dependent strain which occurs when material is subjected to a stress which is lower than the yield point. The importance of the subject lies in understanding the conditions which can lead to plastic flow, microstructure modifications, and final failure. With effective use of mathematical models and stress-strain graphs, the authors examine the mechanisms of creep, structural plasticity, mechanical properties of polycrystals which cause fracture; and new high temperature, creep-resistant materials. Specific coverage is given to the dependence of creep on stress and temperature, transient creep, diffusional creep, and the characteristics of primary, secondary, and tertiary creep. The relationship of stress to work-hardening is explained and actual photographs are used to show the effects of dislocation on the crystal structure. Numerous alloys are investigated, and recommendations are made for alloys which have properties of improved yield stress and high temperature creep resistance.

Philip N. French
NASA Scientific and
Technical Information Program

METEOROLOGY

International bibliography of meteorology from the beginning of printing to 1889.

Four volumes in one: Temperature, Moisture, Winds, Storms. Edited by James Rodger Fleming and Roy E. Goodman. Upland, PA: Diane Publishing Co.; 1994. 732 p. \$195.00. Oversize, cloth. ISBN 0-941-37504-0.

International meteorological vocabulary. 2d ed. Secretariat of the World Meteorological Organization. Geneva, Switzerland: 1992. Report WMO/OMM/VMO, no. 182. 784 p. \$100.00. Oversize, paperbound (available from the American Meteorological Society, Boston, MA). ISBN 9-26302-182-1.

On January 7, 1996, the northeast U.S. experienced the blizzard of the century. Consequently current weather records are being frequently discussed. By contrast, the *International Bibliography of Meteorology (IBM)* goes back more than 4 centuries, recording the meteorological occurrences of phenomena that are printed in books, journals, and pamphlets. There are some 56,000 titles by 13,000 authors in this volume. An unusual feature of the *IBM* is a classification that leads you to material from all parts of the world. Although the work was based on a limited edition, 4-volume set originally issued by the U.S. Army Signal Office in 1889, the current authors have shown wisdom in adding "international" to the title, because nearly two-thirds of the entries are in languages other than English. The front matter is excellent in guiding the user through the bibliography. Among the luminaries represented in the work are Benjamin Franklin, Edmund Halley, and

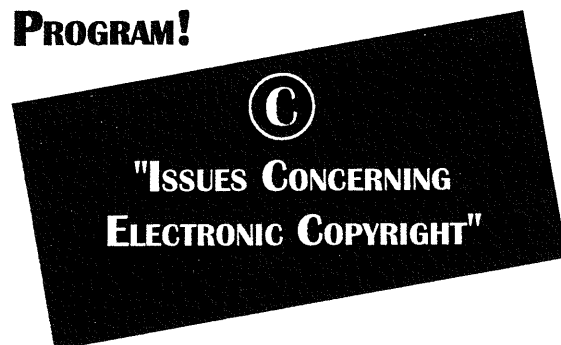
surprisingly, Cotton Mather. The type selected for this volume is user-friendly in both size and design. The sturdy cloth covers and binding, along with the acid-free paper, prepares the book for use it will receive through the years. The *IMB* should be next to the book reviewed below because it is multilingual and necessary for foreign meteorological terms.

The *International Meteorological Vocabulary*, 2d ed, (*IMV-2*), comes some 25 years after the first edition. I had the privilege of knowing the chief editor of the first edition, Malcolm Rigby. Unfortunately, Malcolm died several years before its completion and the Canadians took over the task of finishing it. *IMV-2* has 4 columns of English,

French, Spanish and Russian terms. The definitions are concise and clear. They contain italicized terms that appear elsewhere in the vocabulary. The type face is clear, but not as good as *IBM*. The method for showing cross-references is to use the cross-reference under the main entry. Each entry is cited alpha-numerically, and when there is a cross-reference to a main terms it only refers you to the alpha-numeric term. There are 3,500 terms in *IMV-2*, and the editors welcome additions. These two reference books should be on the shelves of meteorologists, and weather enthusiasts, as well as in public, special and academic libraries.

Ron Buchan
Technical Information Program

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PART 3

SCITECH BOOK NEWS REVIEWS

Ellis Mount, Selector

The following is a selection of entries from several issues of *SciTech Book News*, reprinted with the permission of Book News Inc. *SciTech Book News* is published eight times per year, each issue reviewing over 700 new titles in the physical and biological sciences, mathematics, medicine, engineering, computer science, technology, and agriculture.

For a sample issue and subscription information, contact Book News, Inc., 1024 NE 57th Ave., Portland, OR 97213. (503) 281-9230, FAX (503) 287-4485, e-mail: booknews@booknews.com.

SCIENCE (GENERAL)

Q10 1-85739-106-3

World databases in patents. Title main entry. Ed. by C.J. Armstrong. (World databases series) Bowker-Saur, ©1995 324 p. \$165.00

A new directory that offers access to databases useful to intellectual property researchers and information professionals. It includes coverage of trade names, patents, trademarks, and standards used throughout the world, and includes on-line, CD-ROM, and real-time databases, diskette, magnetic tape, fax, wire, and data broadcast information. The alphabetically arranged entries include reviews with database names, subject description, years of coverage, number of records, etc.; and evaluative information examining the variations between each on-line host, medium, or format. Includes a list of all addresses referenced in the various entries and indexes by subject and database name.

MATH, COMPUTING

QA 1-85739-038-5

World databases in physics and mathematics. Title main entry. Ed. by C.J. Armstrong. (Bowker-Saur world databases series) Bowker-Saur, ©1995 1085 p. \$165.00

A reference that provides evaluative and comparative information on electronic products available in the broad fields of physics and mathematics. It covers databases that are available worldwide in any language and any electronic form—CD-ROM, online, realtime, disk, and tape. Each entry includes, where available: name(s) of databases, type of database, years of coverage, numbers of records, geographical coverage, languages, search software, search aids and manuals, full description of database, and host or provider information. Includes address, database name, and subject indexes.

QA76.54 0-8186-6980-2

Real-time technology and applications; proceedings. Real-Time Technology and Applications Symposium (1995: Chicago, IL). Computer Society Press, ©1995, 259 p. \$60.00 (pa)

The purpose of the May 1995 symposium was to bring together developers and researchers from universities, industry, and government to advance real-time technology and its applications. The proceedings comprise papers and posters that reflect recent developments in operating systems and scheduling, fault-tolerance, databases, programming languages, tools, communication networks, architecture, performance modeling and measurement, and case studies of real applications. No index.

QA76.57 95-10987 0-13-324435-0

Multimedia; computing, communications, and applications. Steinmetz, Ralf and Klara Nahrstedt. (Innovative technology series) Prentice-Hall, Inc., ©1995 854 p. \$62.00

A reference that provides a global view of the emerging multimedia field, covering the three domains of devices, systems, and applications. The results presented serve as a basis for the development of individual components of a multimedia system and suggest some parameters to be kept in mind. The topics include basic sound, image, and graphics concepts; video and animation; data compression; optical storage media; multimedia operating and communication systems; documents, hypertext, and MHEG; user interfaces; synchronization; and multimedia applications.

QA76.64 95-10572 0-07-911857-7

Data communications using object-oriented design and C++. Ananthaswamy, Anil. (McGraw-Hill series on computer communications) McGraw-Hill Book Co., ©1995 320 p. \$50.00

A guide to data communications software design using object-oriented

techniques in C++. It shows how to address real-world programming issues largely ignored by textbooks, highlighting the power of object-oriented programming through the implementation of an end-to-end protocol. The ISO 7776 Data Link layer is developed in its entirety.

QA76.7 95-19011 0-13-678012-1

Programming languages; design and implementation. 3d ed. Pratt, Terrence W. and Marvin V. Zelkowitz. Prentice-Hall, Inc., ©1996 654 p. \$58.00

A text that provides an overview of the key paradigms used in developing modern programming languages. It considers software and hardware architecture when discussing programming language design and implementation issues in order to provide programmers with the perspective necessary to develop correct and efficient software. This edition (second was 1984) introduces procedural languages and object oriented classes through the use of C, C++, and Smalltalk. LISP, Prolog, and ML provide discussion of different programming paradigms.

QA76.76 94-24431 0-07-014774-4

CICS application design. Crownhart, Bob. (J. Ranade IBM series) McGraw-Hill Book Co., ©1995 217p. \$45.00

Provides guidelines for designers of Customer Information Control Systems, covering all the IBM platforms including the recently announced CICS/6000 and CICS for OS/400. Crownhart, author of IBM's Workstation CICS and a programmer for Blue Cross, explains utilizing the client/server and other functions, weighing tradeoffs, distributed and cooperative processing, and other aspects. He addresses environments across the range from micro to mainframes avoiding specific syntax.

QA76.76 94-35352 1-55558-135-8

The middleware source book.

Colonna-Romano, John and Patricia Srite. Digital Pr., ©1995 781 p. \$39.95 (pa)

Provides middleware information for software architects, system integrators, and client/server systems builders, examining middleware services, such as remote procedure call and object brokering, that enhance the portability, distributability, and interoperability of client/server systems. Describes interface standards, application programming interfaces and communication protocols, architecture, and software products for middleware services. Includes a glossary.

QA76.76 94-19779 0-201-11972-2

SafeWare; system safety and computers.

Leveson, Nancy G. Addison-Wesley, ©1995 680 p. \$49.50

Leveson (computer science and engineering, U. of Washington) summarizes what is known about the safety of electro-mechanical systems, particularly those operated or monitored by computer. Emphasizing the importance of integrating software safety efforts with system safety engineering, she presents the elements of a program that includes management, hazard and requirements analysis, design for safety, design of the human-machine, interface, and verification.

QA76.76 94-49676 0-471-01009-X

Software assessment; reliability, safety,

testability. Friedman, Michael A. and Jeffrey M. Voas. John Wiley & Sons, ©1995 271 p. \$64.95

Provides software designers and developers with techniques for measuring and enhancing the safety and testability of the programs they produce, utilizing a new assessment optimization technique called testability analysis, pioneered by author Voas. Includes original techniques for designing and coding programs to maximize their testability, and a new method of generating test cases to

support testing. For graduate students and professionals. Contains exercises.

QA76.9 94-25601 0-8186-6542-4

Advanced topics in dataflow computing and multithreading. Title main entry. Ed. by

Guang R. Gao et al. Computer Society Press, ©1995 450p. \$54.00

Provides reports from many of the world's projects engaged in the current evolution and application of dataflow concepts. Their subject matter emphasizes the broad reach of dataflow principles in program representation from language design to processor architecture and compiler optimization techniques. The volume is divided into five sections: processor design, language and programming issues, compiling, resource management and scheduling, and program characteristics and performance studies. No index.

QA76.9 95-113543 0-7913-2073-1

Handbook of information security

management; 1994-95 yearbook. Title main entry. Ed. by Zella G. Ruthberg and Harold F. Tipton. Warren Gorham Lamont, ©1994 427 p. \$142.00 (pa)

The first section (five articles) provides advice on securing senior management support for security initiatives; cost-effective testing of business continuity plans; and techniques for developing security awareness among end users. The second section (five articles) offers guidance on evaluating the security of packaged software; compares MVS and UNIX security mechanisms; and presents a program for preventing, eradicating and recovering from virus attacks. The third part (six articles) focuses on specific techniques for securing communications and network traffic, with techniques for securing wireless LAN transactions and implementing Kerberos. The final section (nine articles) provides coverage of national and international security laws and techniques for detecting computer abuse.

QA76.9 94-49667 0-13-305152-8
Integrating personal computers in a distributed client-server environment.
 Khanna, Raman. Prentice-Hall, Inc., ©1995
 662 p. \$46.00

A guide to the design, implementation, and management of distributed client-server computing environments for desktop integration. Covers trends in the emerging component-based desktop, middleware standards, desktop and cross-platform systems management, e-mail architectures, and mobile computing and telecommuting. Uses five case studies to illustrate the use of strategies such as integrated information sharing and leveraging middleware standards. Compares vendor strategies of companies including DEC, IBM, and Microsoft.

QA76.9 94-40488 0-471-11389-1
Protection and security on the information superhighway. Cohen, Frederick B. John Wiley & Sons, ©1995 301p. \$24.95 (pa)

Weaknesses in information systems have been exploited to gain the upper hand in negotiations, ruin reputations, win military conflicts, and commit serious crimes. Cohen discusses the seriousness of information security, how it can affect people, organizational vulnerability, and what can be done for protection.

QA76.9 95-2741 0-201-87687-6
Virtual reality systems. Vince, John. (ACM SIGGRAPH books series) Addison-Wesley, ©1995 388 p. \$44.95

Introduces students and professionals to the current state of the art in virtual reality (VR) technology, examining the core technologies underlying VR, such as real-time computer graphics, color displays, and simulation software. Outlines physiological, psychological, hardware, and software principles, discusses mathematical techniques, and investigates current and potential applications in engineering, entertainment, science, and training. Contains b&w and

color photos and illustrations, and 3D viewing glasses.

ASTRONOMY

QB528 94-67788 0-309-05148-7
Solar influences on global change. Title main entry. Board on Global Change, Commission on Geosciences, Environment, and Resources, National Research Council. Natl. Academy Pr., ©1994 163 p. \$25.00 (pa)

A study that reviews the sun-Earth system and global change research, and details research on solar variations and climate change, solar variations and the middle and upper atmosphere, the Earth's near-space environment, and origins of solar variability. Discusses research strategies for monitoring solar forcing and terrestrial solar effects, and makes recommendations for research priorities. No index.

QB539 95-10246 0-201-40791-4
Solar neutrinos; the first thirty years. Title main entry. Ed. by John N. Bahcall et al. Addison-Wesley, ©1994 440 p. \$60.20

Reproduces over 100 technical papers relating to the study of solar neutrinos, published in the scattered journals of a galaxy of disciplines over the past 30 years. They cover standard model expectations, experiments, nuclear fusion reactions, physics beyond the standard model, and helioseismology. The introduction surveys the development of this century's investigation into why the sun shines. Of interest to researchers and students in physics and astronomy, and to historians of science. No index.

PHYSICS

QC381 0-471-94816-0

Handbook of geometrical tolerancing; design, manufacturing and inspection.

Henzold, G. John Wiley & Sons, ©1995 413 p. \$79.95

Presents current information on geometric tolerancing, including the international standardization laid down in ISO-Standards and the differences with the American and the East European Standards, as well as additional specifications laid down in the British and German standards. Also discusses techniques such as vectorial dimensioning; provides hints for manufacturing according to geometrical tolerancing; outlines principles for the inspection of geometrical deviations; and offers examples for tolerancing appropriate to various functional requirements.

QC665 94-42315 1-56032-385-X

Impedance boundary conditions in electromagnetics. Hoppe, Daniel Jay and Yahya Rahmat-Samii. Taylor & Francis Group, ©1995 176 p. \$59.50

Explains a method for solving the increasing problem of electromagnetic scattering from complex objects. Its main advantage is in allowing a complex structure to be replaced with an appropriate impedance relationship between the electric and magnetic fields on the surface of the object. That in turn allows the ignoring of the complexity of the internal structure beneath the surface, thus considerably simplifying the problem and its solution. Addressed to researchers in electromagnetic scattering and advanced solution techniques, and suitable as a supplemental text for a graduate course in electromagnetics.

QC761 95-17274 0-306-45030-5

Stability of superconductors. Dresner, Lawrence. (Selected topics in superconductivity) Plenum Press, ©1995 225 p. \$49.50

Explains how and when superconductors, once they lose their ability to conduct, get progressively worse instead of better, and what someone trying to make a magnet out of one can do about the problem. A bi-level treatment, the main text suitable for graduate and senior students in physics or engineering, and marked sections containing more detail and advanced material for readers with background in applied superconductivity.

QC809 95-3752 0-87590-043-7

Space plasmas; coupling between small and medium scale processes. Title main entry.

Ed. by Maha Ashour-Abdalla et al. (Geophysical monograph; 86) Am. Geophysical Union, ©1995 390 p. \$80.00

Addresses the issue of achieving agreement between space observations and that body of plasma theory that accounts for the interrelations of plasma behavior and electromagnetic inhomogeneities and fluctuations. The volume covers such diverse subjects as solar processes, shocks, the magnetosphere-ionosphere coupling, waves, stochasticity, magnetotail dynamics, reconnection, auroral phenomena, transport theory, cusp phenomena, particle acceleration, current sheet, and wave-particle interactions. Member price, \$56.

QC928 95-7109 0-7844-0061-X

Guidelines for cloud seeding to augment precipitation. Title main entry. Ed. by Archie M. Kahan et al. (ASCE manuals and reports on engineering practice; no.81) Am. Soc. Civil Engineers, ©1995 145 p. \$27.00 (pa)

An ASCE manual presenting a spectrum of professional practice guidelines and technical details involved in using cloud seeding technology. Discusses economic,

environmental, social, and legal factors that determine an acceptable cloud seeding program, as well as the necessary materials, devices, and scientific procedures involved.

CHEMISTRY

QD10 94-78346 0-7514-0206-0

Biodegradability of surfactants. Title main entry. Ed. by D.R. Karsa and M.R. Porter. Blackie, ©1995 257 p. \$119.95

In light of the debate in Europe over whether to tighten or loosen environmental controls on detergents and other surfactants, specialists in the various fields report on surfactant biodegradability mechanisms, test methods, legislative requirements, and individual consideration of the four ionic classifications of surfactant: anionics, nonionics, cationics, and amphoterics.

QD96 94-23081 0-471-95364-4

Hydride generation atomic absorption spectrometry. Dedina, Jiri and Dimiter L. Tsalev. (Chemical analysis; v.130) John Wiley & Sons, ©1995 526 p. \$84.95

Describes one of the most accurate analytic techniques for the picogram-range analysis of chemicals such as antimony, arsenic, lead, selenium, and tin, trace amounts of which have biological, environmental, and technological importance. Covers the theoretical background and experimental approach, and methodological and analytical applications in a wide range of fields of ten specific elements. Includes a bibliography of over 1,500 references and its own battery of indexes. Of interest to practicing analysts using hydride generation for atomic absorption or other spectrometric methods, and researchers and students in the field.

QD172 95-10717 1-56081-647-3

Transition metal oxides. Rao, C.N.R. and B. Raveau. VCH Publishers, ©1995 338 p. \$115.00

Provides an overview of the range of structures and properties of the various classes of complex transition metal oxides. Structures are presented in great detail employing polyhedral representation. The relationship between structure and material properties is explored, synthetic methods are outlined in an accessible manner, and descriptions are given of the important strategies employed for the preparation of oxides. Serves as both a tutorial and a handbook for students, teachers, and researchers in inorganic chemistry, condensed matter physics, ceramics, and materials science.

QD262 3-906390-12-8

Modern synthetic methods, 1995. Ernst, Beat and Christian Leumann. VCH Publishers, ©1995 453 p. \$80.00

Overviews the current trends and recent advances in such aspects of synthetic organic chemistry as solvent effects on chemical transformations, reactions on surfaces, new syntheses of oligosaccharides and nucleic acid analogues, and antibody catalysis. The six papers, from a 1995 symposium in Interlaken, Switzerland, discuss the biology of the trypanosome cell surface, glycosylation methods, controlling chemical reactivity and selectivity with catalytic antibodies, and other topics. Reproduced from typescripts.

QD381 94-30634 0-471-94392-4

Macromolecular reactions; peculiarities, theory, and experimental approaches. PlatØ, Nikolai Alfredovich et al. John Wiley & Sons, ©1995 438 p. \$148.00

A comprehensive theoretical and experimental analysis of macromolecular reactions, addressing the many fundamental problems relating to the chemical reactions of polymers that have arisen in the past three

decades. Describes the basic regularities that distinguish the chemical behavior of long-chain molecules and of units and functional groups incorporated in the chains in various transformations. Not so much concerned with what reactions can and cannot proceed with macromolecules, but with why they behave as they do in reactions and with constructing an explanatory physical chemistry analogous to that for small organic molecules. For polymer chemists and physicists in industry or academia.

QD453 3-527-29063-X

Electrochromism; fundamentals and applications. Monk, Paul M.S. et al. VCH Publishers, ©1995 216 p. \$98.00

For physicists and material scientists or engineers, provides a general background of liquid-crystal displays, including terminology, scope, coloration, electrochemistry, kinetics, mechanisms, and the construction of devices. Describes inorganic systems considered for electrochromic applications, systems such as metal oxides, phthalocyanine compounds, and Prussian blue; and organic systems such as bipyridilium and electroactive conducting polymers. Also explores the elaborations of polyelectrochromism and photoelectrochromism and electrochromic printing.

QD502 94-20434 0-7923-2940-6

New trends in Kramers' reaction rate theory. Title main entry. Ed. by Peter Talkner and Peter Henggi. (Understanding chemical reactivity; v.11) Kluwer Academic Pubs., ©1995 251 p. \$125.00

Reviews some of the theoretical developments and extensions of the reaction rate theory, focusing on escaping from metastable states through noise-assisted hopping and/or quantum tunneling, which is important in many physical, chemical, and biological processes. Ten papers consider various selected aspects, including anharmonic barrier corrections in the spatial

diffusion regime, invariant densities and escape rates for maps with weak Gaussian noise, and the quantum mechanical theory of chemical reaction rates. For researchers and graduate students in chemistry, physics, or biology.

QD543 95-7011 0-8247-9099-5

Solubilization in surfactant aggregates. Title main entry. Ed. by Sherril D. Christian and John F. Scamehorn. (Surfactant science series; v.55) Marcel Dekker, ©1995 545 p. \$195.00

A reference that brings together the current knowledge about the newly developing research areas where advances are most rapid. It includes chapters that discuss the solubilization of organics of various types in single-surfactant and mixed surfactant micelles, as well as studies of the forces involved and mathematical descriptions of these effects. Solubilization in admicelles and vesicles is also addressed in several chapters. Methods of measuring solubilization, both classical and new instrumental techniques, are thoroughly covered. Finally, a chapter on solubilization in detergency describes one practical application of the phenomenon.

QD715 0-471-59769-4

Laser techniques in chemistry. Title main entry. Ed. by Anne B. Myers and Thomas R. Rizzo. (Techniques of chemistry; v.23) John Wiley & Sons, ©1995 429 p. \$125.00
or graduate students and researchers who are familiar with at least one type of optical spectroscopy, explains the techniques and applications to chemistry of ten types of laser spectroscopy that have matured beyond the experimental stage but are not yet routinely used. Describes how the particular spectroscopy is carried out experimentally and/or interpretively, the types of systems to which it is applicable, the type of information that can be learned from it, and some speculations about possible further developments and extensions in the near

future. Balanced between time-resolved and frequency-resolved techniques, and between applications to gas-phase and condensed-phase phenomena.

QD908 91-45809 0-7923-2950-3

International tables for crystallography; v.A: Space-group symmetry, 4th ed. Title main entry. Ed. by Theo Hahn. Kluwer Academic Pubs., ©1995 877 p. \$180.00

The second edition (1987), published by D. Reidel, is cited in Powell. Published for The International Union of Crystallography, the present volume treats the symmetries of one-, two-, and three- dimensional space groups and point groups in direct space. Part I, Tables for Plane Groups and Space Groups, includes definitions of symbols and terms, guide to the use of the tables, determination of space groups, axes transformations, and synoptic tables of space-group symbols. Part II, Symmetry in Crystallography, begins with an algebraic approach to crystallographic symmetry, followed by sections on lattices and point groups. The remaining sections deal with symmetry operations, space-group symbols, and isomorphic subgroups. The final sections discuss lattice complexes and normalizers of space groups.

GEOLOGY

QE366 95-3663 0-87590-852-7

Mineral physics and crystallography; a handbook of physical constants. Title main entry. Ed. by Thomas J. Ahrens. (AGU reference shelf; 2) Am. Geophysical Union, ©1995 354 p. \$65.00

A reference for professionals and students in solid Earth and planetary geophysics, providing data on crystallographic and thermodynamic properties of minerals and thermal expansion, elasticity and viscosity, electrical properties, and plastic rheology of minerals, glasses, liquids, and melts. Includes phase diagrams of Earth-forming minerals, and data on infrared, raman, and optical

spectroscopy of Earth materials. Contains numerous graphs and tables.

QE538 94-34763 1-56080-072-0

Seismic physical modeling. Title main entry. Ed. by Daniel A. Ebrom and John A. McDonald. (Geophysics reprint series; no. 15) Soc. of Explor. Geophy., ©1994 519 p. \$98.00 (pa)

Reproductions of 44 technical papers from scientific journals, each illustrating a facet of seismic wave behavior, chosen for the significance of the findings rather than the cleverness of the method or instruments. Limited to seismic modeling relevant for practical exploration, avoiding crustal and deep-earth, borehole acoustic, or non-seismic physical modeling. Includes only papers written in or translated into English. Covers overviews, early work, tests of wave theory, physical model data tests of processing algorithms, wave propagation on complex media, and future prospects. Nearly 150 additional articles are listed in the annotated bibliography. No index.

BIOLOGY

QH303 95-11639 0-8247-9477-X

Using the biological literature; a practical guide. 2d ed. Davis, Elisabeth B. and Diane Schmidt. (Books in library and information science; 57) Marcel Dekker, ©1995 421 p. \$85.00

A revised and expanded reference that acquaints students new to the literature of biology with important primary and secondary resources of the field that can be found in large research libraries, emphasizing current materials in the English language. All main fields of the biological sciences are covered, but applied areas are not included. The arrangement is by broad subject chapters, which are subdivided by form of material. Entries are annotated only once, according to their primary focus, and cross-referenced elsewhere as appropriate. Every textbook

listed is recommended, although not all of them are annotated.

QH375 95-943 0-262-03232-5

Without miracles; universal selection theory and the second Darwinian revolution. Cziko, Gary. MIT Press, ©1995 385 p. \$30.00

Cziko (educational psychology, U. of Illinois, Urbana-Champaign) integrates several scientific disciplines within the perspective of universal selection theory to account for cases of fit involving living organisms, even those that appear miraculous. He asserts that all novel forms of adapted complexity, from single-celled organisms to scientific theories, emerge from an evolutionary process involving cumulative blind variation and selection, and describes the ongoing "second Darwinian revolution."

QH438 94-37628 0-309-04886-9

Calculating the secrets of life; applications of the mathematical sciences in molecular biology. Title main entry. Ed. by Eric S. Lander and Michael S. Waterman. Natl. Academy Pr., ©1995 285 p. \$39.95

Examining how mathematical research and methods can contribute to important discoveries in biology, this National Research Council report explores how differential geometry, topology, and differential mechanics have allowed researchers to "wind" and "unwind" DNA's double helix to understand the phenomenon of supercoiling. It explores how mathematical tools are illuminating the workings of enzymes and proteins, and describes how mathematicians are researching the origin, structure, and function of life by applying stochastic and statistical theory to the study of DNA sequences.

QH541 93-41974 0-471-51768-2

Effects of acid rain on forest processes.

Title main entry. Ed. by Douglas L. Godbold and Aloys Huttermann. (Wiley series in ecological and applied microbiology) John Wiley & Sons, ©1994 419 p. \$125.00

Reflecting the more recent developments in investigations of the effects of acidification on forest decline particularly the Soiling Project, a pioneering European study which ran from 1966 to 1973 this volume discusses element budgets and changes in soil chemistry for both European and North American forest ecosystems. It addresses the effects of acid deposition not only on root and canopy growth of forest trees, but also on the micro-and macroscopic flora and fauna. Pathogenic organisms influenced by the chemical and physical properties of the soil are also addressed. The final chapter tries to simplify the complex interaction of the forest using an integrative theory of forest ecosystems.

TECHNOLOGY (GENERAL)

T10 94-49677 0-471-12281-5

The complete guide to writing and producing technical manuals. Haydon, Leslie M. John Wiley & Sons, ©1995 294 p. \$44.95 (pa)

A guide to creating technical manuals for any equipment, covering types of technical manuals and their arrangement, planning procedures, layout and format, writing style and technical editing techniques, illustration and table preparation, and printing and binding. Useful for engineers, scientists, and technical writers. Includes a glossary of technical terms, and appendices on punctuation, abbreviations, and footnotes, mathematical and scientific terminology, and the metric (SI) system. Contains b&w illustrations and photos.

T50 92-28122 1-56396-323-X

Measurement errors; theory and practice.

Rabinovich, Semyon. AIP Press, ©1995 279 p. \$39.95 (pa)

Presents methods for estimating errors and uncertainties of real measurements performed in industry, commerce, and experimental research, for theoreticians, physicists, engineers, and graduate students. Coverage includes basic concepts of metrology, characteristics of classes of measuring instruments, instrument calibration, and modern probability-based methods of estimating errors and uncertainty. New to this paperback edition is a chapter on dependencies between components of measurement uncertainty.

T58 94-35323 0-13-045931-3

Ethical aspects of information technology.

Spinello, Richard A. Prentice-Hall, Inc., ©1995 226 p. \$25.33 (pa)

An overview with case studies of various moral and social problems that are raised by the pervasive use of information technology and that are likely to be encountered by information technology vendors, corporate managers, and executives responsible for managing their organization's computer systems and information resources. Covers issues such as vendor-client relations, anti-competitive practices, privacy, intellectual property rights, and information security as well as technical background on topics such as networking and electronic monitoring.

ENGINEERING (GENERAL, CIVIL)

TA165 93-3641 0-8247-9581-4

Coordinate measuring machines and systems.

Title main entry. Ed. by John A. Bosch. Marcel Dekker, ©1995 444 p. \$125.00

For engineers and managers involved with manufacturing, defines coordinate measuring machines and explains how they can be applied to maximum effect in the

manufacturing process. Discusses non-Cartesian configurations, accessory elements, software, evaluating performance, environmental factors, enhancing accuracy, integrating measurement, financial evaluations, and trends in the technology and market. Also samples some applications such as power train components, airfoils, gauge calibrations, airframe assemblies, and gears.

TA331 94-48550 0-7844-0070-9

Metric units in engineering; GOING SI; how to use the international system of measurement units (SI) to solve standard engineering problems.

Wandmacher, Cornelius. Am. Soc. Civil Engineers, ©1995 319 p. \$28.00 (pa)

First published 15 years ago by Industrial Press Inc. Provides guidance for practicing engineers, students, and educators who, by federal mandate, will soon exclusively use the Systeme Internationale (SI) the modernized metric system of units and uses worked examples to explain how to use the system to solve standard engineering problems in areas such as dynamics, fluid mechanics, and heat transfer. This revised edition contains an updated bibliography and an appendix on the history of metrication.

TA402 94-39391 1-56990-148-1

English-German dictionary of materials engineering and technology.

Goetzel, Claus G. and Lilo K. Goetzel. Hanser Publishers, ©1995 753 p. \$97.50

A comprehensive, bilingual glossary that specializes in materials and their origins, processing techniques, applications, and the finished product. The terms, definitions, and concepts presented cover a broad range of current and emerging fields within the manufacturing industry, especially in science, R&D, engineering, and mixed technologies. Examples of development fields covered include polymer chemistry, advanced ceramics, electronic, ecological, and environmental topics. Acidic paper. Note:

CiP shows the title as Dictionary of materials....

TA403 94-32860 0-471-83084-4

Friction and wear of materials. 2d ed.

Rabinowicz, Ernest. John Wiley & Sons, ©1995 315 p. \$49.95

Presents the theory of mechanical surface interactions as it applies to friction, wear, adhesion, and boundary lubrication, for mechanical and design engineers, surface scientists, and tribologists. Evaluates properties of materials, and discusses lubricants and the sizes and shapes of wear particles. This second edition incorporates new material on erosive wear, impact wear, and friction, and uses SI units of measurement. Includes sample problems.

TA418 93-23652 0-470-23373-7

Handbook of polymer-fibre composites. Title main entry. Ed. by F.R. Jones. (Polymer science and technology series) Longman Scientific & Tech, ©1994 418 p. \$195.00

A reference guide that offers a concise, current examination of fiber-reinforced plastics from both a scientific and a technological perspective, for professionals and for advanced students in related fields. Assembled by an international panel of authors from universities, industry, and research institutes, it introduces the topic for non-specialists, and covers the main subdivisions of the field: fibrous reinforcements for composite materials; polymers and matrices; fabrication of polymer composites; micro- and macromechanical properties of composites; and environmental aspects. Copublished in the US with Wiley.

TA418 94-23706 1-56990-137-6

Wear in plastics processing; how to understand, protect, and avoid. Mennig,

Gⁿter. Hanser Publishers, ©1995 452 p. \$128.00

A summary of the basic phenomena of wear and potential protective measures. It

covers the fundamentals of wear and tribology, the various wear-reducing measures (special steels, hardening techniques, etc.), and new developments in these technologies. The volume is divided into six sections: introduction; tribological principles; materials involved in wear; wear testing; wear under industrial conditions; and developmental trends. Based on a 1987 conference, and translated from the original German edition of 1990. For polymer process engineers, researchers, and designers in the plastics processing industry, and plastics machinery operators.

TA461 94-40182 0-471-04506-3

Architectural metals; a guide to selection, specification, and performance. Zahner, L. William. John Wiley & Sons, ©1995 421 p. \$89.95

A lavishly illustrated (mostly in color) collection of useful information for architects, engineers, metal fabricators, and design professionals and students who plan to select and use metals and metallic finishes. In eight comprehensive chapters, each devoted to a specific metal, Zahner supplies a logical framework for selecting the best materials. He provides information including historical overviews, performance evaluations, maintenance and restoration techniques, available forms and colors, weathering and corrosion characteristics, and fastening, welding, and joining methods.

TA462 95-7009 0-8247-9592-X

Corrosion mechanisms in theory and practice.

Title main entry. Ed by P. Marcus and J. Oudar. (Corrosion technology; 8) Marcel Dekker, ©1995 641 p. \$185.00

Reviews recent advances in the understanding of corrosion and protection mechanisms in 16 contributed chapters. Chapters 1 to 10 cover the basic phenomena in corrosion. Chapters 11 to 16 provide the connection between the theoretical aspects of

corrosion mechanisms and practical applications in industry: corrosion inhibition, atmospheric corrosion, microbially induced corrosion, corrosion in nuclear systems; corrosion of microelectronic and magnetic-storage devices, and the technologically important area of corrosion protection by surface coatings.

TA660 0-8176-2864-9

Stability and optimization of flexible space structures.

Britvec, S.J. Birkhauser Boston, ©1995 280 p. \$134.00

Presents up-to-date methodologies in the analysis and optimization of the elastic stability of lightweight statically determinate, and indeterminate, space structures made of flexible members which are highly stiff when loaded centrally at the nodes. Due to their high load-bearing capacity-to-weight ratios, these flat and curved space pin-connected open or enveloped lattices and reticulated shells are gaining importance in aerospace and other fields. This comprehensive text examines the unusual criterion in the design of such structures which calls for eliminating or isolating the onset of the elastic dynamic collapse thereby increasing their safe stability limit.

TA666 94-38030 0-07-019911-6

Wood engineering and construction

handbook. 2d ed. Title main entry. Ed. by Keith F. Faherty and Thomas G. Williamson. McGraw-Hill Book Co., ©1995 864 p. \$79.50

Examples and data on wood joints, members, components, and structural systems; engineering properties of wood and new wood products; design guidelines for wood beams, bridges, and pile foundations; commercial lumber standards, fire resistance, and sound control; adhesive repair techniques and troubleshooting tips are among the offerings for structural engineers, architects, and construction professionals. Updated from

the 1989 edition to conform with the 1991 National Design Specifications for Wood Construction, incorporate the latest technologies and regulations, and illustrate recent examples of wood structures.

HYDRAULIC ENGINEERING

TC555 94-24469 0-08-041918-6

Hydraulic design of stepped cascades, channels, weirs, and spillways. Chanson, Hubert. Pergamon Pr., ©1994 261 p. \$88.00

Chanson (hydraulics and environmental engineering) briefly reviews the 2,500-year history of using stepped channels and spillways to distribute the energy of a flow along the channel and thus reduce the energy at the bottom; and in water treatment plants to enhance the air-water transfer of atmospheric gasses and volatile organic components. He then describes the hydraulics of the two possible flow regimes, nappe and skimming; the effects of flow aeration and air bubble entrapment; the process of gas transfer; examples of the various types and designs of stepped flows; and the accidents and risks involved with the higher hydrodynamic forces on the step faces than on smooth chute bottoms.

TC937 94-21646 0-471-95211-7

Design of diversion weirs; small scale irrigation in hot climates. Baban, Rozgar. John Wiley & Sons, ©1995 228 p. \$49.95 (pa)

Provides step-by-step instruction on designing diversion weirs, with sections covering site investigation, topographic survey, soil, hydrological and hydraulic analysis, uplift pressure, sediment control, structural analysis of weirs and intake structures, and financial analysis of constructing weirs. Includes b&w illustrations and exercises. For irrigation/civil engineers.

ENVIRONMENTAL ENGINEERING

TD169 94-67890 0-7514-0037-8

Clean technology and the environment. Title main entry. Ed. by R.C. Kirkwood and A.J. Longley. Blackie, ©1995 350 p. \$129.95

Primarily for industrial and environmental chemists, describes the concept of "clean technology" as an approach for protecting the environment by preventing pollution at source, minimizing waste, and reducing energy use. Early chapters review the general effects and economics of industrial pollution. Coverage then moves on to an examination of the issues and what is being done on a sector-by-sector basis. Surveys of clean methods of chemical synthesis, and the use and supply of clean energy complete the volume.

TD195 95-945 0-262-13307-5

Nuclear wastelands; a global guide to nuclear weapons production and its health and environmental effects. Title main entry. International Physicians for the Prevention of Nuclear War and the Institute for Energy and Environmental Research. MIT Press, ©1995 666 p. \$55.00

A handbook that provides concise histories of the development of nuclear weapons programs of every declared and de facto nuclear weapons power, as well as detailed surveys of the health and environmental effects of this development both in these countries and in non-nuclear nations involved in nuclear weapons testing and uranium mining. For scholars, students, policy makers, journalists, and peace and environmental activists.

TD196 94-41541 1-56081-540-X

Environmental chemistry of the heavy elements; hydrido and organo compounds. Thayer, John S. VCH Publishers, ©1995 145 p. \$65.00

A concise, critical review of roles played by hydrides and alkyls of the heavier elements

in the natural environment and the international research taking place in the field. Also discussed is the role that microorganisms play in the formation, distribution and degradation of heavy element compounds, and future possibilities and needs in the field.

TD795 94-211287 0-419-15990-8

Landfilling of waste; barriers. Title main entry. Ed. by T.H. Christensen et al. E & FN Spon, ©1994 631 p. \$129.50

The second in a three-volume set seeking to establish international principles for disposing of waste in landfills and disseminate information and ideas on improvements at existing landfill sites and new directions in design and research. The 36 papers include presentations at biennial symposia in Sardinia, Italy, and chapters written for the volume. They focus on lining and drainage to contain waste in landfills, discussing general issues; the design and construction of systems; the properties and quality control of clay, synthetic materials, geotextiles, and geogrids; and such aspects of leachate drainage and collection as hydraulics and incrustation problems. The first of its kind, the set will probably remain a classic of the field until reduction and recycling efforts make landfills unnecessary.

TD897 95-1591 0-935470-89-1

Recycling and reuse of industrial wastes. Smith, Lawrence A. et al. Battelle Press, ©1995 110 p. \$34.95 (pa)

Originally prepared for an arm of the US Environmental Protection Agency, outlines specific technologies for recycling and reusing materials that require removal from contaminated sites being remediated under the Superfund or Resource Conservation and Recovery Act. Includes case studies to demonstrate the application of the technologies to actual conditions. Addressed to people responsible for the project, but the information could prove useful to anyone

engaged in the remediation or production of industrial waste.

TD1040 94-66574 0-309-05092-8

Ranking hazardous-waste sites for remedial action. Title main entry. National Research Council. Natl. Academy Pr., ©1994 294 p. \$30.00 (pa)

The final report of The Committee on Remedial Action Priorities for Hazardous Waste Sites, which was charged in 1991 with examining the principle ranking methods being used or considered by federal and state agencies to rank hazardous-waste sites for remedial priority. Among the issues addressed are the technical and policy purposes of the ranking methods, their effectiveness in achieving those purposes, the embodied assumptions, the uncertainties, and the flexibility of the methods for considering new information and for analyzing and comparing the cost effectiveness of remediation. An interim report covering only the Department of Defense measures was released in 1992. No index.

TRANSPORTATION

TE228 95-2213 0-275-95155-3

Transportation infrastructures; the development of intelligent transportation systems. Title main entry. The Diebold Institute for Public Policy Studies, Inc. Praeger, ©1995 207 p. \$59.95

The first volume in a series of studies prepared for the Diebold Institute focusing on the potential application of information technology to societal infrastructures worldwide, and the policy conditions and cooperation between the public and private sectors needed to bring it about. Reviews the history of transportation infrastructure and policy in the US; outlines the nature of intelligent transportation systems and services, their benefits, and the forces obstructing and encouraging their development; and compares experiences in Europe and Japan.

BUILDING CONSTRUCTION

TH441 94-28063 0-566-07575-X

Investigating rainwater penetration of modern buildings. Endean, Kenneth F. Gower Publishing, ©1995 208 p. \$84.95

Describes leakage mechanisms and efficient investigation techniques, and provides guidance on remedial work. Also demonstrates that technical errors are often precipitated by organizational faults. Case histories are included, covering a wide variety of materials and systems, from brickwork to curtain walling and from PVC membranes to profiled steel sheets. Some 140 diagrams and photographs reinforce the text and illustrate likely problems and solutions. Distributed by Ashgate.

TH2031 93-31757 0-471-53369-6

Ramsey/Sleeper architectural graphic standards. 9th ed. Ramsey, Charles George. John Wiley & Sons, ©1994 918 p. \$190.00

Cited in Walford and BCL1 (but not in BCL3, a glaring omission). The standard work in the field since 1932, the present edition (eighth was 1988) contains 20 chapters and includes some 10,000 illustrations. This edition adds a new chapter on masonry that helps redefine the use and application of this reliable building material; a new chapter on building types and space planning; 60 pages based on the 1990 Americans with Disabilities Act; a resource section at the end of each chapter, which lists published references, trade associations, government agencies, and regulatory organizations pertaining to the material in the chapter, including addresses and phone numbers; and 18 pages on site, community, urban, and regional land planning. Periodic updates are available by subscription.

MECHANICAL ENGINEERING

TJ223 94-47286 0-7503-0291-7

Advances in actuators. Title main entry. Ed. by A.P. Dorey and J.H. Moore. (Sensors series) IOP Publishing, Inc., ©1995 221 p. \$130.00

Redressing a relative neglect in the literature, synthesizes the current status of different types of actuator technology, applications, and future directions for research. Recognizes the more complex and sophisticated sensing and control functions increasingly required by industry while providing advice on the initial selection of the actuator, how to build them, how they operate, their advantages and limitations, and key features of different technologies. Among the types described are fluid- power, electro-rheological, optical, and magnetostrictive; smart- power devices, miniature nanoactuators, and silicon microactuators are also covered. For instrumentation engineers in the automotive, electronics, and process industries.

ELECTRICAL ENGINEERING, ELECTRONICS

TK1081 94-49670 0-7844-0072-5

Guidelines for evaluating aging penstocks.

Title main entry. Task Committee on Guidelines for Aging Penstocks of the Energy Division of the American Society of Civil Engineers. Am. Soc. Civil Engineers, ©1995 192 p. \$20.00 (pa)

Presents practical engineering applications used to assess safety and extend the life of hydroelectric facilities fabricated and constructed before 1950. Addresses design codes, criteria, construction, and fabrication practices specific to steel, concrete, and wood penstocks as well as reviewing inspection techniques, analysis methods, and case studies.

TK1085 95-1956 0-7844-0073-3

Guidelines for design of intakes for hydroelectric plants. Title main entry.

Committee on Hydropower Intakes of the Energy Division of the American Society of Civil Engineers. Am. Soc. Civil Engineers, ©1995 469 p. \$42.00 (pa)

A guide that summarizes the state of the art in intake design, examines hydraulic and structural constraints and environmental and operational considerations, and expands the traditional view of intake design to include conveyance upstream from the pressure conduit, as well as the inlet to the pressure conduit supplying water to the turbine. It addresses variables including sediment, ice, fish, and water quality, with a section on evaluation of existing intakes. Includes b&w diagrams and photos, and a glossary.

TK2821 3-89578-000-6

Switching, protection and distribution in low-voltage networks; handbook with selection criteria and planning guidelines for switchgear, switchboards and distribution systems. 2d ed. Belzner, Petra et al. Siemens AG, ©1994 659 p. \$55.00

A handbook that assists users of low-voltage switchgear, switchboards, and distribution systems in the planning of installations as well as in the specification, selection, operation, and maintenance of equipment. Detailed selection guidelines as well as planning and circuit diagram examples help readers achieve technically and economically sound solutions for specific applications. Reference is made throughout to relevant Siemens products and catalogs as well as to national and international specifications, regulations, and standards. An updated and expanded translation from the German (first edition, 1984). Available from VCH.

TK3401 94-44627 0-7803-1030-6

Handbook of electrical and electronic insulating materials. 2d ed. Shugg, W.

Tillar. IEEE Press, ©1995 578 p. \$89.95

Updated edition (the first was published in 1986 by VNR) of a reference devoted to all classes of insulating materials for electrical and electronic applications. Each product classification includes major producers, technologies and methods of manufacture, trade names, applicable standards and specifications, properties and uses, and development programs and market trends. There is also information on SI symbols and their applications, conversion factors for frequently used units, and an extensive temperature conversion chart. For electrical and electronics engineers and technologists in related fields.

TK5104 94-23063 0-07-038476-2

Mobile communication satellites. Logsdon, Tom. McGraw-Hill Book Co., ©1995 277 p. \$55.00

This guide provides an understanding of the latest mobile wireless communications technology and describes the future potential for powerful space-borne relay systems with global reach. It explains key concepts such as constellation selection, digital implementations, data compression schemes, and spread-spectrum technologies, and discusses predictions and trends in communication satellites and personal communications. Includes b&w diagrams, appendices of publications and professional societies, and a glossary.

TK5105 95-5961 0-13-297178-X

ATM foundation for broadband networks.

Black, Uyless. Prentice-Hall, Inc., ©1995 426 p. \$46.00

Examines the B-ISDN model and analyzes the key functions of ATM technology in both LANs and WANs,

covering ATM adaptation layers, switching operations, traffic management, and network management, with a chapter on SONET topology and equipment, for systems engineers. Includes discussion on the trend toward worldwide standards for carrier transport technology, multiplexing techniques, and switching methodologies.

TK5105 94-23204 0-13-300716-2

A guide to NetWare for UNIX. Gunn, Cathy. Prentice-Hall, Inc., ©1995 360 p. \$33.00 (pa)

Provides information on using NetWare for UNIX version 3.11 products for business needs. Features a history and overview, and covers NetWare for UNIX on HP computers and on the Host system; HP 9000 and HP 3000 setup, management, and printing; example network configurations; NetWare operations and networks; client connections; and print services. Appendices list information on NetWare protocols packet structures. Assumes some familiarity with Native NetWare and its services, and system administration on UNIX systems.

TK5105 94-48196 1-56205-437-6

Internet firewalls and network security.

Hare, R. Christopher E. and Karanjit Siyan. New Riders Publishing, ©1995 410 p. \$35.00 (pa)

Explains precisely how existing security products for computers are inadequate for working on the Internet; how to estimate security requirements, risks, and advantages in connecting to the Internet; and how to construct firewalls and take other security measures. For system administrators and advanced computer users. The list of information sources is limited to Internet addresses.

TK6570 94-41512 0-07-038089-9

Mobile cellular telecommunications; analog and digital systems. 2d ed. Lee, William C.Y. McGraw-Hill Book Co., ©1995 664p. \$60.00

A reference that provides a complete technical description of the design, analysis, and maintenance of cellular systems, covering subjects such as cell-site antennas and mobile antennas, cochannel interference reduction, noncochannel interference, frequency management and channel assignment, and data links and microwaves. This second edition reflects changes in the technology over the past five years, and features new materials on the CDMA standard, microcell systems, and digital cellular systems. Contains b&w graphs, tables, and equations.

TK7870 94-49204 0-7506-9314-2

Materials for electronic packaging. Title main entry. Ed. by Deborah D.L. Chung. Butterworth-Heinemann, ©1995 368 p. \$125.00

Government and academic researchers present 16 self-contained tutorial chapters that examine all aspects of electronic packaging from a materials perspective, a shadowy area to most workers in the field whose education is in electrical engineering. They consider the packaging of integrated circuit chips; the interconnections for signal transmission, power, and ground; the encapsulations for protecting the chips and interconnections from moisture, chlorides, and other environmental factors; the heat sinks or other cooling devices needed to remove heat from the chips; the power supply; and the housing for electromagnetic interference shielding. Composites, metal films, polymers, and other materials are described, along with processes for joining and materials testing.

TK7871 95-7360 0-7923-9565-4

Frequency compensation techniques for low-power operational amplifiers.

Eschauzer, Rudy G.H. and Johan H. Huijsing. (The Kluwer international series in engineering and computer science) Kluwer Academic Pubs., ©1995 245 p. \$105.00

A text for graduate students and professional designers of integrated amplifiers, that explores frequency compensation techniques suited for the new generation of low-voltage, low-power integrated amplifiers. B&w photos and diagrams support a review of the basic theory of negative feedback, introductions to multistage and multipath compensation techniques, and worked-out silicon realizations and measurement results. All compensation techniques are treated in a stage-number based order, progressing from a single transistor to circuits with six stages and more.

TK7871 95-2747 0-8493-2500-5

Handbook of electromagnetic materials; monolithic and composite versions and their applications. Neelakanta, Perambur S. CRC Pr., ©1995 591 p. \$129.95

A reference/text that explains the basic concepts underlying the electromagnetic properties of materials, and addresses the ways of deploying them in modern applications. The introductory sections explain the electromagnetic fundamentals and detail the interaction of electromagnetic force fields with matter on a microscopic scale. Subsequent chapters extend the properties of electromagnetic materials to the macroscopic level so as to depict the electric and/or magnetic behavior of a given material by a set of macroscopic measurable quantities. Throughout, examples are given from the viewpoint of practical applications of electromagnetic materials in various fields. For students, materials scientists, technologists, and engineers.

TK7872 95-989 0-7923-9564-6

Analog signal generation for built-in-self-test of mixed-signal integrated circuits.

Roberts, Gordon W. and Albert K. Lu. (The Kluwer international series in engineering and computer science; v.312. Analog circuits and signal processing) Kluwer Academic Pubs., ©1995 122 p. \$75.00

Demonstrates a method by which high-precision analog waveforms can be generated on chip, with minimal silicon overhead, using a digital oversampling-based oscillator, for use in testing digital integrated circuits (ICs). Introduces the testing problem and conventional signal generation techniques, and details the method and equipment and its application in multi-tone signal generation and testing. Also discusses piece-wise linear waveforms and delta-sigma modulation techniques. Includes b&w diagrams and appendices of source code.

TK7874 94-20185 0-8186-6292-1

Manufacturing yield evaluation of VLSI/WSI systems. Ciciani, Bruno. Computer Society Press, ©1995 437 p. \$55.00 (pa)

Furnishes the engineering methodologies for evaluating the cost- benefit ratio of fault-tolerant systems used in VLSI/WSI systems, focusing in particular on manufacturing fault analysis and yield evaluation. Following an introduction and overview, the volume is divided into four chapters: techniques for yield enhancement, manufacturing defect and fault modeling, yield evaluation methods, and cost-benefit ratio of fault-tolerant mechanisms. Each chapter contains a collection of reprinted papers, preceded by an introduction, abstracts of the papers, and further references. No index.

TK7876 95-4985 0-471-31189-8

Frequency selective surface and grid array.

Title main entry. Ed. by T.K. Wu. (Wiley series in microwave and optical engineering) John Wiley & Sons, ©1995 331 p. \$79.95

Theory, applications, design, and fabrication techniques for frequency selective surfaces and active grid arrays, technology that is being used to create filtering devices in microwave and higher- frequency bands. Covers fundamentals and analytical techniques, as well as applications from the reflector antenna system used in satellite and spacecraft communications and band- pass radome to solar energy grids. Useful both as a tutorial and also as a reference for project and system/design engineers working with antennas, optics, millimeter waves, microwaves, radar, and low observable radomes. Includes a disk.

MOTOR VEHICLES, AERONAUTICS, ASTRONAUTICS

TL220 93-87534 1-56091-475-0

Advancements in electric and hybrid electric vehicle technology; proceedings. Title main entry. (SP-1023) Soc./ Automotive Engin'rs, ©1994 125 p. \$49.00 (pa)

The major automobile manufacturers are playing their cards close to the dashboard when it comes to developing electric cars to meet California's 1998 zero-emissions standard, but other scientists and engineers here share their findings on such aspects as chassis design, thermal comfort, power quality problems at charging stations, lead-acid batteries, and proton exchange membrane fuel cells. Descriptions of student competitions and their contributions are also described. The 14 papers were delivered to an international conference in Detroit, February to March 1994. No index.

TL500 92-52644 0-7918-0664-2

Flight-vehicle materials, structures, and dynamics; assessment and future directions; v.6: Computational structures technology.

Title main entry. Ed. by Ahmed K. Noor and Samuel L. Venneri. ASME, ©1995 187 p. \$100.00

Concludes the series designed to inform materials scientists, engineers, and researchers about recent developments in their own and other fields that might impact future flight vehicles, and to identify the technical needs waiting to be filled in various areas. Covers computational structures technology, new computing systems and future high-performance computing environments, and multi-disciplinary design optimization. Also discusses computational materials science from the perspectives of the atomic level, process modeling, solid-state diffusion, and constitutive equations for solid mechanics. No index.

TL671 94-43754 0-87389-331-X

Aviation industry quality systems; ISO 9000 and the Federal Aviation regulations.

Dreikorn, Michael J. ASQC Quality Press, ©1995 337 p. \$60.00

Dreikorn demonstrates how to develop a quality system that complies with both the ANSI/ISO/ASQC series quality standards and the applicable regulations of the FAA. Chapters are organized according to the major requirements of the ANSI/ISO/ASQC Q9001-1994 quality standards. Includes helpful examples and sample forms, cross-reference matrices comparing sections of each set of quality standard requirements, and a glossary of industry acronyms.

TL695 94-34320 0-275-95034-4

Flight management systems; the evolution of avionics and navigation technology.

Fishbein, Samuel B. Praeger, ©1995 237 p. \$65.00

Presents a historical overview of aviation electronics and instrumentation and their

evolution to automated systems, and reviews the major instrumented elements comprising the flight management system. Discusses ground- and space-based systems that influence the design of airborne systems, and offers a look at the future with descriptions of smart sensors, smart skins, and integrated modular avionics. Includes an annotated bibliography, a glossary, and b&w photos of navigation instruments.

TL787 1-887022-02-3

United States space directory. Title main entry. Ed. by Scott Sacknoff. Space Publications, ©1995 213 p. \$79.95 (pa)

The 1995-96 edition profiles organizations from US industry sectors including launch vehicles, remote sensing, communications, and support contractors. Sections cover industry facts and figures; companies; government; universities and non-profit research institutions; and education. A miscellaneous section includes information on associations, publications, and information resources. Indexed by topic, state, and by subtopic. Includes a number of glossy corporate advertisements. Address the publisher at PO Box 5752, Bethesda, MD 20824-5752.

TL1499 95-18686 0-309-05125-8

Orbital debris; a technical assessment.

National Research Council (U.S.). Committee on Space Debris. Natl. Academy Pr., ©1995 210 p. \$39.95

A National Research Council report (prepared for the National Aeronautics and Space Administration) that examines the methods which can be used to characterize orbital debris, estimates the magnitude of the debris population, assesses the hazard that this population poses to spacecraft, and explores potential methods to protect spacecraft. The report also looks at the projected future growth in the debris population and evaluates approaches to reducing that growth.

MINING ENGINEERING, METALLURGY

TN10 92-11-19664-7

Minerals and metals trade in the Asia-Pacific region. Title main entry. (ST/ESCAP/1247) United Nations Pub., ©1994 233 p. \$75.00

A review of the major mineral industries in the Asia-Pacific region, regional trade in minerals and metals, and the prospects for growth in minerals and metals trade for the rest of the 1990s. The review was commissioned by the UN Economic and Social Commission on Asia and the Pacific (ESCAP) and conducted by the Australian Bureau of Agricultural and Resource Economics (ABARE).

TN870 94-240285 0-89181-338-1

The Petroleum system; from source to trap. Title main entry. Ed. by Leslie B. Magoon and Wallace G. Dow. (AAPG memoir; 60) Am.Assn. Petroleum Geol., ©1994 655 p.\$114.00

The petroleum system concept blends petroleum geology and geochemistry together in a way that can substantially increase exploration success. In this volume, two of its developers describes the petroleum system and provide a mechanism for evaluating migration from the active source rock to the trap. The volume is divided into six parts: introduction; essential elements; processes; identification and characterization; case studies Western Hemisphere; and case studies Eastern Hemisphere. In addition to a glossary of terms, there are two appendices: petroleum system calculation sheet; and standard abbreviations and units. For companies involved in the search for oil and gas.

TN871 94-42990 0-88415-286-3

Formation invasion; with applications to measurement-while-drilling, time lapse analysis, and formation damage. Chin, Wilson C. Gulf Pub. Co./Book Div., ©1995240 p. \$65.00

Chin (process engineering, U. of Houston) proposes solutions for invasion problems faced by a range of engineers and drillers in the petroleum industry. After reviewing the fluid mechanics of invasion, he outlines methods for modeling static filtration, time-lapse analysis, and complex problems; numerical modeling; and forward and inverse multiphase flow modeling. Assumes only elementary calculus and some familiarity with Darcy's law. The formulas and algorithms derived are available as compiled, executable software from the publisher.

CHEMICAL TECHNOLOGY

TP149 94-14064 0-8169-0564-9

Guidelines for process safety fundamentals for general plant operations. Title main entry. Am.Inst. of Chemical Eng., ©1995 360 p. \$120.00

The Institute presents its currently recommended fundamental safety practices and methods of applying them to reduce the risk of operating accidents in the chemical process industries. Concerned not so much with technical or engineering matters as with management issues and responsibilities especially at smaller plants that emphasize batch processing and lack a full complement of safety specialists. Covers materials and chemicals handling, process equipment and procedures, cleanup and process changeover, training, special procedures and programs, and a range of general topics such as inspection, spare parts, storage, hazardous work, and control of the working environment.

P149 94-46233 0-8169-0627-0

Guidelines for safe process operations and maintenance. Title main entry. Am.Inst. of Chemical Eng., ©1995 319 p. \$120.00

Organized into ten chapters, this book provides a discussion of the roles of first- and second-line operations and maintenance supervisors through the various phases of the life cycle of a plant. Each of the remaining chapters treats one of the phases of the life cycle of a plant: design, construction, pre-startup and commissioning, startup, operation, maintenance, shutdown, decommissioning, and demolition. Each chapter provides guidance, tools, and checklists to assist supervisors in implementing and practicing of process safety program principles. Includes a substantial glossary and appendices.

TP155 94-23201 0-07-021176-0

Control valves for the chemical process industries. Fitzgerald, Bill. McGraw-Hill Book Co., ©1995 448 p. \$60.00

A reference providing chemical engineers and valve designers with details on the types, design, and use of control valves used in chemical process plants. Includes sizing, materials, performance and installation, set-up and calibration, maintenance, financial considerations, and typical applications. Also discusses integrating valves into the process control loop, and new developments such as loop tuning, diagnostics, and fieldbuses. Well illustrated.

TP156 94-44281 0-7506-9156-5

Advances in particulate materials. Bose, Animesh. Butterworth-Heinemann, ©1995 422 p. \$125.00

Introduces some of the basic approaches and underlying scientific principles of manufacturing with powder, detailed coverage being reserved for the more recent advances in processing and consolidation methods. Treating a selection of topics in considerable detail rather than surveying the whole field,

covers chemical production approaches, melt atomization, mechanical alloying, intermetallic compounds, and particulate injection molding. Does not describe the ANCORDENSE process recently unveiled by Hoeganaes Corporation that has taken the conventional press and sinter industry by storm.

TP343 95-3199 1-56091-589-7

Automotive fuels reference book. 2d ed. Owen, Keith and Trevor Coley. Soc./Automotive Engin'rs, ©1995 963 p. \$129.00

Covers the manufacture, storage, distribution, and handling of gasoline and diesel fuel, combustion and volatility, additives, emissions, racing fuels, and alternative fuels, with appendices on fuel chemistry, emissions legislation worldwide, quality specs, and properties of hydrocarbons. This second edition has updated information on health and environmental effects of fuels and alternative fuels such as LPG, LNG, and CNG. Useful for automotive engineers, fuel technologists, manufacturers, and environmentalists.

TP756 94-49706 0-88415-204-9

Underground gas storage facilities; design and implementation. Flanigan, Orin. Gulf Pub. Co./Book Div., ©1995 179 p. \$75.00

Addressed to planners and designers rather than petroleum or reservoir engineers, describes a systematic approach to designing efficient underground gas storage facilities. Provides information and technical tools to evaluate a reservoir, determine the particular requirements of the job at hand, and design a facility that will operate at its full potential. A section focusing on the economic aspects examines the specific cost factors and presents examples to determine an economically optimum design.

TP1130 90-22784 0-412-99181-0

Plastics engineering handbook of the Society of the Plastics Industry, Inc.. 5th ed. Title main entry. Ed. by Michael L. Berins.

Chapman & Hall, ©1991 869 p. \$104.00

Since 1947, the most comprehensive reference available on plastics processing methods, equipment, and materials, cited in BCL3, Sheehy, and Chen. Sponsored by the Society of the Plastics Industry, Inc., the revised and updated fifth edition incorporates all major advances in the plastics industry since the previous edition was published in 1976. It covers the state of the art in both materials high-temperature thermoplastics, liquid crystal polymers, and thermoplastic composites and processing resin transfer molding, structural reaction injection molding, gas-assisted injection molding, stretch blow molding, automation, and process control. Includes a complete glossary that defines words and expressions in current industry use, and specialized glossaries with illustrations in the chapters on extrusion and injection molding.

MANUFACTURES

TS155 95-19295 0-89006-767-8

Applying total quality management to systems engineering. Kasser, Joe. Artech House,

©1995 298 p. \$60.00

Describes principles of systems engineering and project management using scenarios set in the fictitious company, Federated Aerospace, to illustrate models and methodologies in systems engineering and explain concepts such as risk mitigation, contractual background, costs and their relation to quality, documentation, proposals, ethics, and ISO 9000. Includes an overview of systems engineering and the systems development life cycle.

TS156 94-31190 0-13-199373-9

The ISO 9000 documentation toolkit; 1994 revised ISO 9001 standard. Novack, Janet L. Prentice-Hall, Inc., ©1995 352 p. \$79.95

A practical tool that provides a plan for applying the ISO 9000 standard to daily tasks. Word processor templates, worksheets, and examples are included to help users convert plans into the required documentation. The accompanying diskette is in DOS format for WordPerfect 5.1, Microsoft Word 5.1 for Macintosh, and Microsoft Word 2.0 for Windows.

TS156 94-46885 0-87389-312-3

Managing records for ISO 9000 compliance.

Brumm, Eugenia K. ASQC Quality Press, ©1995 437 p. \$49.00

Brumm reviews and interprets each paragraph of the ANSI/ISO/ASQC Q9001-1994 standard that implies or specifically states a records requirement. She explains how to plan, develop, and implement the various components of records management in order to help readers reach a higher first-pass success rate. She also shows how to reduce the number of hours involved in meeting the records requirements for these quality standards. Also included in the appendixes are 60 actual records from organizations that have successfully passed the ISO 9000 registration process.

TS176 95-6352 1-56327-071-4

Manufacturing strategy; how to formulate and implement a winning plan. Miltenburg,

John. Productivity Press, ©1995 372 p. \$45.00

Miltenburg presents a simple yet sophisticated method for planning and implementing the most appropriate production system for any company. The objective being to provide the highest possible levels of outputs a market wants most quality, cost, delivery, flexibility, innovation, and performance the planning method makes clear what approach to take to get the needed

outputs. The key tool is a multidimensional worksheet that links the competitive analysis of manufacturing outputs to the seven basic production systems and the levers that control a company's capability for success in each system.

TS192 95-1327 1-56327-087-0

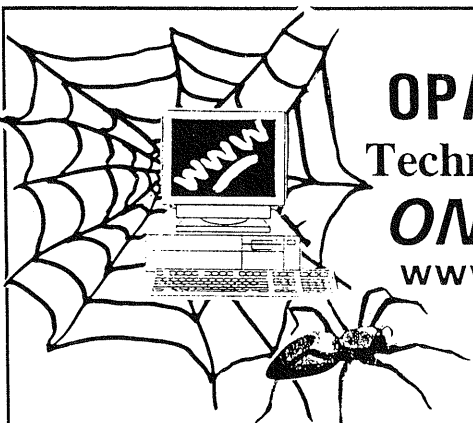
Implementing TPM; the North American experience. Robinson, Charles J. and Andrew P. Ginder. Productivity Press, ©1995 197 p. \$45.00

Explores the implementation, planning, and deployment of total productive maintenance (TPM), the latest management import from Japan, tailored to the needs of North American plants, with discussions on implementing TPM in union environments, benchmarking practices to support TPM, overall equipment effectiveness measures, and requirements for computer manufacturing maintenance systems. Includes case studies of successful TPM implementations in North America.

TS320 95-3750 0-87170-545-1

Tool materials. Title main entry. Ed. by J.R. Davis. (ASM specialty handbook) ASM International, ©1995 501 p. \$159.00

This hefty volume details cutting tool materials and materials used for molds, dies, and other metalworking applications, and answers questions relating to materials selection. Four sections provide data on the applications and operating parameters of six classes of materials; materials for metalworking applications and plastic molding; heat treatment and secondary processing of tool materials; and microstructural analysis and failure analysis of tool materials. Includes b&w photos and diagrams.



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CONFERENCE CALENDAR

Marsha Wilson, Editor

UPCOMING LIBRARY/INFORMATION SCIENCE AND RELATED CONFERENCES March 1996-August 1996

USA

New Mexico Library Association. Annual
Conference
Las Cruces, New Mexico
March 4-6

Intermedia: 10th International Conference &
Exposition on Multimedia & CD-ROMs
March 5-7, 1996
San Francisco, California

Louisiana Library Association. Annual Conference
March 19-22
Alexandria, LA

Digital Libraries '96 - 1st ACM International
Conference on Digital Libraries
March 20-23, 1996
Bethesda, Maryland

Oregon Library Association Conference
March 26-27
Portland, Oregon

Public Library Association National Conference
March 26-30, 1996
Portland, Oregon

Association for Information & Image Management
Show & Conference
March 31-April 3, 1996
Chicago, Illinois

Art Libraries Society North American Annual
Meeting
April 1996
Miami Beach, Florida

Catholic Library Association
April, 1996
Philadelphia, Pennsylvania

Library Association of Tennessee
April 11-13, 1996
Knoxville, Tennessee

Council Of Planning Librarians
April 14-17, 1996
Orlando, Florida

Library Association of Alabama
April 15-21, 1996
Mobile, Alabama

Intermedia/International Conference and Expo on
Multimedia & CD-ROMs
April 16-18, 1996
San Francisco, California

IT Services & Outsourcing Strategy Conference &
Expo
April 23-25, 1996
New York, New York

Library Association of Connecticut
April 23-24, 1996
Cromwell, Connecticut

School Librarians Association TX
April 23-27, 1996
Houston, Texas

Archivists Society of California
April 24-27, 1996
Carmel, California

Library Association of New Jersey
April 30-May 2, 1996
Atlantic City, New Jersey

Library Association of Florida Conference And
Exhibition
May, 1996
Tampa, Florida

Library Association of Maryland
May 11-12, 1996
Hagerstown, Maryland

Information Display Society
May 12-17, 1996
San Diego, California

National Online Meeting & Integrated Online
Library Systems
May 14-16, 1996
New York, New York

Library Association of Washington
May 14-18, 1996
Bellevue, Washington

Society Of Southwest Archivists
May 16-18, 1996
Albuquerque, New Mexico

Virginia Library Association for Paraprofessionals
Annual Conference
May 20-21
Richmond, VA

American Society for Information Science Midyear
Meeting
May 20-22, 1996
San Diego, California

American Booksellers Association (ABA)
May 25-28, 1996
Chicago, Illinois

Library Association of Utah
May 29-June 1, 1996
Snowbird, Utah

Medical Library Association
May 31-June 5, 1996
Kansas City, Missouri

Library Service to Children Association
June, 1996
San Francisco, California

Special Libraries Association 87th Annual
Conference
June 8-13, 1996
Boston, Massachusetts

Association of Christian Librarians Annual
Conference
June 18-21, 1996
Cedarville, Ohio

American Theological Library Association Annual
Conference
June 21-25, 1996
Denver, Colorado

Graphic Arts Marketing Information Service
Quarterly Meeting
June 23-26, 1996
Asheville, North Carolina

American Library Association (ALA) Annual
Conference
July 4-10, 1996
New York, New York

Specialized Cooperative Library Agencies
Association
July 4-10, 1996
New York, New York

Theatre Library Association
July 4-10, 1996
New York, New York

Library Service To Children Association

July 5-11, 1996

New York, New York

American Association of Law Libraries (AALL)

July 6-11, 1996

Indianapolis, Indiana

American Association School Librarians Annual Meeting

July 6-9, 1996

New York, New York

Church & Synagogue Library Association Conference

July 6-11, 1996

Denver, Colorado

World Association Document Examiners

July 20-24, 1996

Chicago, Illinois

Library Association Pacific Northwest Annual Meeting

August 14-17, 1996

Fairbanks, Alaska

Nuclear Records Management Association Annual Meeting

August 26-29, 1996

Kissimmee, Florida

American Archivists Society - Annual Convention

August 28-September 1, 1996

San Diego, California

CANADA

Medical Library Association of Quebec

May, 1996

Quebec City, Quebec

Professional Librarians of Quebec

May, 1996

Quebec City, Quebec

Canadian Association of Law Libraries

May 25-29, 1996

Kingston, Ontario

Canadian Library Association

June 6-9, 1996

Halifax, Nova Scotia

Canadian Health Libraries Association

June 12-17, 1996

Toronto, Ontario

Association of Jewish Libraries Annual Convention

June 16-19, 1996

Toronto, Ontario

EUROPE

European Workshop on Interactive Distributed Multimedia Systems and Services

March 4-6, 1996

Berlin, Germany

Fastdoc Workshop on Electronic Document Ordering

March 4-6, 1996

Patras, Greece

20th Annual Conference of the German Society for Classification

March 6-8, 1996

Freiburg, Germany

Bibliostar - Exhibition on Services, Technology and Furnishings for Libraries

March 7-8, 1996

Milan, Italy

Retrospective D'Archives: Figures du Compositeur

March 22-April 10, 1996

Paris, France

Joint European Conference and Exhibition on Geographical Information

March 27-29, 1996

Barcelona, Spain

How to Design & Deliver Information On-Line

April 15-16, 1996

London, UK

INFOBASE - International Trade Fair for Electronic Information Products

May 21-23, 1996

Frankfurt, Germany

International Information Management Congress:
Document Imaging

June 3-6, 1996
Paris, France

Broadband Networks and ATM: Architectures,
Technologies, Standards and Performance
Management for Integrated Multimedia LANs and
MANs

June 10-14, 1996
Garmisch-Partenkirchen, Germany

Digital Media World - International Trade Fair for
Digital Information, Communication & Interaction

June 18-21, 1996
Berlin, Germany

International Conference on Chemistry and
Informatics

July 1-5, 1996
Balatonszeplak, Hungary

International Student Olympic Games on Informatics

July 22-29, 1996
Veszprem, Hungary

OTHER AREAS OF THE WORLD

Working Conference on the Impact of Information
Technology from Practice to Curriculum

March 13-18, 1996
Neve-Ilan, Israel

Information Superhighway China '96

March 19-23, 1996
Beijing, People's Republic of China

7th International Bar Code and Related Automatic
Identification Technology and Equipment Exhibition

May, 1996
Hong Kong, Hong Kong

Intermedia Asia - Multimedia & CD-ROM

Technology Showcase

May 22-25, 1996
Singapore, Singapore

62nd Conference of the International Federation of
Library Associations and Institutions (IFLA): The
Challenge of Change -

Libraries and Economic Development
August 19-24, 1996
Beijing, People's Republic of China

The graphic is a rectangular box with a decorative border of black diamonds. Inside, the title "Special Libraries Association's 1996 Middle Management Institute" is written in a large, elegant script. Below the title, five diamond-shaped boxes are arranged in a row, each containing a topic and location. The topics are "Technology & Applications" (Cleveland, OH), "Management Skills" (San Francisco, CA), "Human Resources" (Boston, MA), "Analytical Tools" (Boston, MA), and "Marketing and Public Relations" (Toronto, ON). A final diamond box on the right contains "Technology and Applications" (Albuquerque, NM). At the bottom of the box, a line of text provides contact information for Tracy Loft, SLA's Manager of Development.

*Special Libraries Association's
1996 Middle Management Institute*

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"Human Resources"
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"Analytical Tools"
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"Marketing and Public Relations"
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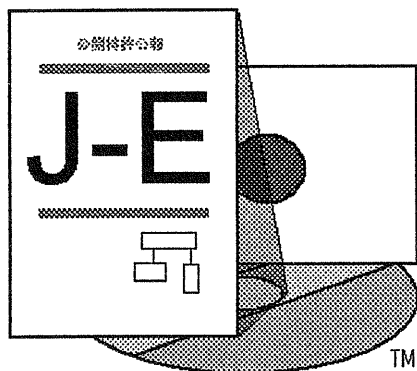
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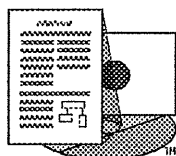
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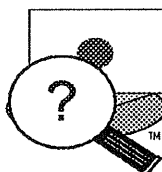


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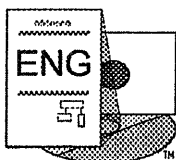
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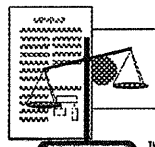
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